

# MANUFACTURERS' RECORD

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## SOUTHWARD.

Last week the MANUFACTURERS' RECORD reported the purchase of a large iron-ore property in Alabama by Harrisburg (Pa.) capitalists already interested in iron properties. It also reported the purchase by New England business men, including ex-Governor Guild, of a large timber, iron and coal property in Tennessee and the payment by Western men of \$1,200,000 cash for a timber property in Louisiana. Now comes the announcement that Pittsburgh manufacturers have purchased a Birmingham concern in the same line of business and will largely increase the plant in size and capacity. This purchase is of the American Bolt Co. at Birmingham, and is made by the owners of the Graham Nut Co. of Pittsburgh, who are in the same line of work, manufacturing bolts, nuts, rivets, pipes, rods, etc.

These investments in the South, which are growing in number, indicate how rapidly the trend of industry and of capital is to this section. Southward the star of empire takes its way.

## BUNCOMBE DISTRESS.

Ownership of timber lands in Canada emerged not long ago by way of Minneapolis in insistence upon the repeal of the tariff upon lumber and its products. The main plea was that such a repeal was necessary to the conservation of lumber in the United States. The agitation appears again by way of St. Joseph, Mo., in circular-letters, imitating typewriting, calculated to impress agricultural journals with the necessity, from the farmer's standpoint, for a re-

peal of the lumber tariff. Here, again, appears the dread of a national disaster in the destruction of our forests. This persistent distress on the part of interests owning lumber in other countries at the thought of the exhaustion of our lumber supply becomes more pitiful than ever when it concerns itself with the welfare of the farmer. If, for the benefit of owners of timber in Canada, the tariff on lumber must be removed, why not, for the benefit of wheat growers in Canada, remove the tariff on wheat? What would the farmers think if the lumber interests of the country should call upon the millions of consumers of food in the United States to demand that the tariff should be taken off of cattle, swine, sheep, corn, oats, oatmeal, rice, wheat, wheat flour, butter, cheese, beans, cabbages, eggs, onions, peas, potatoes and other vegetables, poultry and other food-stuffs? Farmers are not fools.

## NECESSITY FOR CITIES TO AD- VERTISE.

The most progressive places are always doing the most progressive things is the comment made by a close observer of things industrial upon learning that the business and professional men at Buffalo, N. Y., have a tentative plan for spending \$100,000 a year in making known the advantages of that city. According to the *Buffalo Express*, a joint representation of the Chamber of Commerce, the Ad. Club, the Manufacturers' Club, the Retail Merchants' Association and real estate interests has sketched a plan providing means for arousing and uniting public opinion at Buffalo for the promotion of the city's welfare and for following this up by establishing in the Chamber of Commerce bureaus of publicity, of industries, of promotion and of conventions, to have at their disposal at least \$100,000 a year. The argument for the plan is that Buffalo has many natural advantages and that money used in making them known would redound to the welfare of the community in all directions. The argument is a sound one. There are few, if any, cities in this day of sharp rivalry that can afford to rest upon their own knowledge of the resources for manufacturing, commerce, etc., which they possess. They might as well not have them if they are not known in other quarters, for the simple reason that a city that does not attract capital and men is on the quick road to decay, and men and money cannot be attracted to any place whose opportunities for the employment of men and money are not known. Progress of a city, as of an individual, consists in looking for opportunities for greater progress. Hence the wisdom of Buffalo's progressive men.

The growing realization on the part of Buffalo and other enterprising American cities of the value of giving wide publicity to their advantages as manufacturing and commercial centers fits in with a policy which is being adopted

by communities in Great Britain. One of the manifestations of appreciation of the recent growth of the United States as a world Power, to which the MANUFACTURERS' RECORD alluded last week, was the British patent act of last year, requiring a foreigner holding a British patent to carry on the manufacture of his article in Great Britain, lest his patent be revoked and the manufacture of the article covered by it be thrown open to unrestricted competition. It will be recalled that the management of a great estate near Manchester visited this country last fall for the purpose of attracting American patentees to that location as a manufacturing center. Of like intent is an advertisement now appearing in the MANUFACTURERS' RECORD calling attention to the opportunities for manufacturers at Inverness, Scotland, a city of about 25,000 inhabitants. In that there is an alertness as to the situation which many American cities of even larger population might acquire to their enduring benefit.

## WEST VIRGINIA SANITY.

West Virginia is to be congratulated upon the failure of its Legislature to enact into law the measures placing a production tax on coal, oil and gas. The purpose of the bills was to require producers of coal, oil and gas to pay into the State treasury a certain percentage of the gross value of their output. Naturally men interested in the material progress of the State, whether or not they were engaged directly in the enterprises affected, argued that at this time, when every effort should be put forward to bring new men and new money into West Virginia for the development of its natural resources, the legislative energies should not be directed toward hampering industry, enterprise and the good faith of investors. Then, too, while the proposed tax appeared small to the non-producer, it would have been exceedingly onerous for property already assessed for State, county and district taxes in the same manner as other property. It was felt that the measures would have been but the entering wedge for a new line of taxation, removing the brakes upon any tendency to extravagant administration of the State's affairs. The measures were particularly menacing to the coal-mining industry. West Virginia has much coal territory still to be developed. The railroad extensions recently made and still in contemplation have opened up and will open up many new coal-producing areas. But such facilities would have been for naught had the policy been adopted of placing a direct tax upon capital, industry and enterprise willing to take advantage of them. As well had a direct tax been placed upon the production of wheat and corn and apples and peaches and cattle. It is hoped that the discussion of the proposition to tax the production of minerals may be the last to which West Virginia may be

subjected and that other Southern States may follow in West Virginia's wise steps.

## THE STEEL SITUATION AND ITS POSSIBLE EFFECT ON THE SOUTH.

Mr. J. G. Butler, Jr., of Youngstown, Ohio, one of the leading ironmakers of the West, referring to the recent editorial in the MANUFACTURERS' RECORD headed "An Open Letter to the Independent Iron and Steel People," says:

I have read this with a great deal of interest and called it to the attention of others interested. It is a splendid article and ought to do a lot of good.

This is but one of many indications which have come to us of the interest aroused throughout the country, especially among the iron and steel people, by the facts presented in the editorial mentioned. In that open letter the MANUFACTURERS' RECORD pointed out the fact that while the independent steel people have about one-half of the iron and steel output of the country, they own, according to general estimates, only about 15 per cent. of the ores of the Lake Superior district, the other 85 per cent. being owned by the Steel Corporation. This places the independent people in a situation where, without the foundation of an ample supply of raw materials on which to bank, they are looking to the future at a disadvantage. In view of these facts we suggested that the men who have made fortunes in the iron and steel interests and through the advancement of ore and coal properties, men who recognize the opportunity now existing in the South, should throw an anchor to the windward and safeguard themselves by the ownership of coal and ore properties in the South.

It is well to impress upon the public that while the Steel Corporation controls in Alabama probably 700,000,000 tons of ore, several times as much ore is owned by other companies; the four or five leading iron-making companies in the district probably own in the aggregate a very much larger quantity of ore in Alabama than does the Steel Corporation. With the certainty of the vast development which is to be witnessed in the South within the next few years, in the West Indies and Central and South America, there is room enough in that region to justify very large steel-making operations in addition to what the Steel Corporation may do through the development of its plant at Birmingham.

The subcommittee of the Senate, which has been investigating the purchase of the Tennessee Coal & Iron Railroad Co. by the Steel Corporation, will, it is said, report that the latter, through the purchase of the Tennessee Company, bought a property worth several hundred millions of dollars. Except for the future, looking to the increasing value of ore and coal properties, to put such a valuation on this property would be absurd. It is true

the Steel Corporation bought a property with vast stores of raw material, but it had been kicked around Wall Street for years with few friends willing to recognize a future value for it. The men who bought it a few years ago and who undertook its development on broad lines had some realization of its value, but even they would probably not have thought of putting upon it such an estimate as that of the several hundred million dollars reported by the Senate committee.

As to the wisdom of consulting the President of the United States in order to secure permission to do business, comment is hardly necessary. We are not dealing with that phase, but with the report. Although the valuation placed by this report upon the property at the time of the purchase is absurd, it will help to awaken the country to a realization of the fact that the iron ores of the world are becoming more and more valuable. In the public mind it practically places the Government endorsement upon a valuation of several hundred millions of dollars on a supply of ore in Alabama which three or four years ago would not have been ranked in any report as worth one-quarter of that amount. As a matter of fact, the entrance into the Alabama district of the Steel Corporation has practically doubled the intrinsic value of the good iron and coal properties of the State, for this move has given to the world the assurance that that district will now be developed on a scale commensurate with its advantages.

Returning, however, to the suggestion made to the independent steel people: They are now engaged in a struggle the end of which no man can foresee. Those having an ample supply of raw materials have a great bankable asset, the value of which is recognized in all of the markets of the world, but those who have no raw materials, or those whose supply of raw materials is inadequate to their needs, are in an unenviable position. It does not seem likely that they will be able to secure in the open market a supply of ore at prices to permit the full operation of their plants at a profit in times of financial or business depression and low prices.

For several years the MANUFACTURERS' RECORD has vigorously warned the country of this coming danger to the independent iron and steel people and suggested to those who were short of raw materials the wisdom of safeguarding their future. It may yet come about that the competition in the steel trade, which is now on so bitterly, will result in the consolidation of some of the independent steelmakers with the independent iron-making interests of Alabama and other Southern States and thus result in another great combination.

What a chance the situation offers for a combination of all the independent iron companies in Alabama in union with some of the great steel-making concerns of Pittsburg and the West! This would be a logical combination. Or suppose some of the largest independent concerns should follow the example of the Steel Corporation and buy up one or more of the going Alabama iron interests.

The two things most likely to come out of the present condition are, first, the very rapid development in the Central South, through some consolidation of this kind or through the purchase of Southern interests by the large inde-

pendent operators, and, second, the broader development on the Atlantic coast, at Chesapeake Bay points or on the Delaware River or on the Gulf coast of great iron and steel concerns depending to a large extent upon foreign sources for their ore supply. The former would look to the Virginias and Kentucky for coking coal and the latter to Alabama.

An illustration of what can be accomplished in iron-making in Alabama is found in the history of the Sloss-Sheffield Steel & Iron Co. Since the company was formed it has not received a dollar from the sale of bonds or stock issued since its organization. It has since then opened a number of mines, repaired its furnaces and done its entire development work out of earnings. It has paid regular dividends on the preferred stock since the date of issue, and a dividend on the common stock for four and a half years past, and even during the panic year. It has no floating debt, it has doubled its working capital and accumulated a surplus of over \$3,000,000. If this brief record is not a good illustration of what a well-managed iron enterprise in Alabama can accomplish, the MANUFACTURERS' RECORD would like to have a story of any other company that, with the same capital and same volume of business, has surpassed it, whether it be located in America or in Europe. There have been some failures of iron enterprises in Alabama for which there were good reasons, but well-managed companies, backed by ample raw materials and with sufficient working capital, have had no difficulty in making a record of great success. While doing this their raw materials have steadily enhanced in value by reason of the advances in coal and ore properties throughout the world.

The iron and steel interests never pass through such a fight as is on now without some great change taking place, and whatever may happen in the present situation the South will be benefited.

#### IN SOUTHERN MOUNTAINS.

A native of Pennsylvania who for five years has lived in the mountain regions of the South writes from Ellijay, Ga., to the MANUFACTURERS' RECORD:

After a residence in the mountain regions of the South of more than five years we bear testimony that we have never been in any community more peaceful, more law-abiding and more law-respecting. Nor have we ever seen a region so near to great business centers so replete with possibilities for him who will go after them. In other words, the goods are here. Person and property are safe, and in your coming you will be met full halfway by all the people, be they native or "foreigner."

A gentleman of New York got off at the station here to purchase lumber. Being met at the train, his first remark was, "I am very glad to see you. I had no idea of what I was coming to." That remark has been ringing in my ears ever since, and I have used it as a text for several expositions to local friends of what I consider one of the most important phases in the development of the South today. I know it because I have been there myself.

In the first place, the Northern people are very much aware of the vast possibilities and latent wealth in the undeveloped resources of this wonderful part of the country. We may believe that a very large number of people who have read the MANUFACTURERS' RECORD and who have learned from various sources what has been done and is doing, and more, that the beginning is only as yet, are wishing

that the opportunity might come their way to get in, as it were, upon the ground floor. They are thinking, wishing, planning, but dreading. First, it is a long way from home. Then they have heard a great many things and have formed an opinion, as many do, of a city, viewing it from the car window for

the first time, all back doors and yards, and a pretty rough outlook. "I had no idea what I was coming to" expresses it better than anything else, wondering if he were safe, if there might be a hotel, if he could stand the food, if the people would want him—really expectant, but doubting at every step.

It occurs to me that after you have spread the feast before the people you are inviting a very proper step would be to make them know that they are welcome, to make them know that the progressive, courteous man, he from any place you please, will have his energy appreciated and his efforts encouraged. "Good neighbors" will find a lot of the same kind of people wherever they may stop.

One's life is as safe here as in the mountains of Pennsylvania; yes, more so, for we never lock a door here. The hotels are fairly good, and the hospitality of the humblest home is freely offered in case of need. And, best of all, the country is full of great-hearted, willing people, who are hoping and wishing more than anything else that Northerners would come here and open up the properties that they themselves are not able to open.

This letter from a Pennsylvanian will probably come as a distinct shock to individuals whose emotions have been stirred by divers and sundry exploitations of Southern mountain whites which have created an erroneous impression about the character of the sturdy stock peopling the Southern highlands. Residents, for instance, of New York city, where 200 homicides are the record of a year, may be surprised to learn that here in the mountains of Georgia person and property are safe. They should not let their surprise prevent them from accepting the invitation of the Pennsylvanian now making his home there. They and all others in the rest of the country who are anxious to participate in the development of the latent wealth of the South ought to take courage from this letter and go upon an exploring trip to the South, search out some of its vast opportunities and by investments in industries of various kinds, railroads, etc., add to the opportunities of those mountain whites who may be not already enjoying them to make such a living as that they may be able to give to their children opportunities from which they were barred. It is history that from these highlands have come some of the most notable elements of all that is best in Southern civilization. What has happened is still happening and will continue to happen, provided the native strength of the highland folk is not undermined by misdirected philanthropy. The best philanthropy is the giving of opportunity to men and women to work out their own careers upon a basis of self-respect and self-reliance.

#### STRIPPING THE SOUTH.

Robbing Peter to pay Paul is a pretty unprofitable sort of finance. But it is the acting of wisdom in comparison with the policy which has been pursued by some railroads operating in the South of uniting with systems in other parts of the country in giving cheap homeselling rates — away from the South. This is referred to by the *Journal and Tribune* of Knoxville, Tenn., in an editorial referring to cheap rates from the South to the West and Northwest. It says:

The rates are exceedingly low. There never has been and possibly never will be as cheap rates returning as going. The West has been taking from the East and the South and putting up bars to see that there is no return.

Where do Southern railroads find wisdom in entering into partnership with Western railroads to haul away from the South good men, every one of whom the South is needing and will the more need with the future development of this section? \* \* \* The shortsealing railroads will, during the com-

ing two months, send from the South thousands and thousands of good white, true Americans; send them far out West for the paltry sum of a few dollars for a short haul. For every dollar thus earned the railroads may be said to be throwing ten dollars away. The man on the ground where he is needed producing in the South what the South needs will mean ten times more business for the railroads than hustling the man away for a few dollars, never to return.

Here are truths which the MANUFACTURERS' RECORD has emphasized for years. With such great agencies as the Southern Railway, the Illinois Central Railroad, the Louisville & Nashville Railroad, the Norfolk & Western Railway and the Chesapeake & Ohio Railway working for years, in season and out of season, to induce thrifty men to settle in the South for the full development of the territories tributary to their respective lines, it is the height of folly for any railroad operating in the South to encourage any thrifty Southerner to heed the lure of invitation to distant parts. One thrifty man persuaded to turn his back upon opportunities in the South and to seek them elsewhere is a direct blow at the efforts to induce thrifty men to come to the South from other sections. There is no opportunity for the farmer in other parts of the country that cannot be bettered in the South. The man who deserts Southern opportunities loses his main chance in life. The railroad that helps him to desert sharpens the razor with which to cut its own throat. Money made in carrying passengers from the South permanently is as nothing compared with the money lost in passenger and freight traffic destroyed by the depopulating of the South. The South has too long been burning its clothes in order to keep warm.

#### TO SOUTHERN VISITORS IN WASHINGTON.

The range of the activities of the late Southern Commercial Congress at Washington is daily taking ever-widening swirls. Only a week has passed since it startled the universe by giving the financial world opportunity to fill in a draft for \$250 and three promissory notes for \$250 and 4 per cent. interest from date toward the construction of its million-dollar or so Southern Architectural Monument. But that pales into insignificance in the glare of its tender to unsophisticated Southerners landing in Washington for the inauguration of guidance in selecting street cars from the railroad station.

N. B.—But isn't the late Southern Commercial Congress entering upon unfair competition with the professional and skilled Washington guides who have been piloting visitors around for years?

#### MASSING NEGROES SOUTH.

Developments of the past week at Ottumwa, Iowa, may be expected to be followed by reinforced efforts, by way of endowments of universities and colleges through the General Education Board or the Carnegie Pension Board, of co-operation of the National Department of Agriculture and the General Education Board in co-operative farm demonstration work in the South, of Southern Educational Conferences and other sociological and moral "uplift" movements financed from New York, to keep the negroes massed in the South. Indeed, some few Southern newspapers and Southern orators may be expected to continue to applaud utterances of negro or white agents of these New York financed Southern "uplift" movements to the effect that the South is

the best place for the negroes, and that the "best people" of the South must do all they can to make the South as inviting to the negroes as possible.

#### CHILD-LABOR FIASCOS.

When Congress appropriated, about two years ago, \$125,000 for an "investigation" of "child labor" and the employment of women under the auspices of the Bureau of Labor of the National Department of Commerce and Labor by divers Doctors of Philosophy or other sociologizers in post-graduate work the MANUFACTURERS' RECORD was skeptical. It doubted the wisdom of the investigation and felt that, beyond the salaried sociologizers involved in the appropriation, nobody would be especially benefited. About a year ago we tendered our services to the Bureau of Labor in attempting to extricate itself from a North Carolina dilemma into which it had jumped with all its eyes open. Our philanthropy was not appreciated, and we would have lost sight of the incident of the expenditure of \$125,000 had not the organ of all sociologizers in the country, *Charities and the Commons* of New York, of course, made a protest last week. After 10 years or more of a drive against the South in the child-labor agitation engineered from New York this organ complains that in one case authoritative data upon the subject are withheld by the State and the nation. It says:

Not only is the State government silent, but we have had no bulletins of the United States Department of Commerce and Labor containing the information gathered during the past 18 months about the conditions of labor of women and children. Belated information is of trifling value if, indeed, it escapes the fate of most belated information, that of becoming actual misinformation.

Such an utterance from the very arcanum of the agitation can only confirm the long-sustained contention of the unregenerate but generally disinterested that the whole agitation is based upon inadequate knowledge, which in the hands of individuals depending for their living upon the agitation, frequently has been transformed into misinformation and deliberate misrepresentation. It is suspected, though, that the country may have surcease from sociologizing for four years at least.

#### SECTIONALISM IN TARIFF REVISION.

A letter from the South to the MANUFACTURERS' RECORD quotes a leading boiler-making concern as saying "the tariff agitation is paralyzing business." Another manufacturing enterprise in the same city advises "the agitation on the tariff question is almost putting a good many fellows to the bad and is demoralizing business generally."

Thus the country is being injured and business hampered by tariff agitation and a demand for a reduction wholly unnecessary and not called for by the business conditions of the country. The agitation in favor of a revision of the tariff has been largely artificial and without just foundation. The party in power is responsible for bringing about this agitation. If the whole matter is not promptly settled without any serious revision of the tariff, it will be responsible for all the ills that follow and it will prove itself a great injury rather than a blessing to the business interests of the country, and business interests include the farmer, the merchant, the mechanic, the day laborer, as well as the manufacturer. The whole tariff agitation to

a large extent has been brought about by people who are seeking to secure lower duties or free trade on the articles which they consume in manufacturing, and retain the present duty, or possibly secure a higher duty, on the articles which they produce. The demand for free ore, free lumber, a reduction on pig-iron, free wool, free hides and similar things produced in the South is purely a selfish demand on the part of those who want to buy these materials at a lower cost without reducing the price of their product.

It is not at all improbable but that the tariff on coarse yarns, for instance, produced largely in the South, will be reduced, while at the same time the tariff on the finer product of the New England mills will be increased. Such a move is thought by some well-informed men to be quite certain. It is quite probable that unless the South bestirs itself in a far more vigorous way than it has done it will find its lumber and its iron ore and many other things sacrificed under this tariff revision for the benefit of other sections. It is up to the party in power to show whether in the tariff agitation it means to give equal protection to the South as to other sections, and thus whether it is really interested in the welfare and prosperity of the South as its leaders so persistently, and many of them we feel assured so honestly, claim. But the crucial test as to whether words or deeds will count most will be shown in the tariff bill.

#### THE COTTON MOVEMENT.

In his report for February 19 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 172 days of the present season was 10,907,821 bales, an increase over the preceding year of 1,987,530 bales. The exports were 6,332,505 bales, an increase of 673,154 bales. The takings were, by Northern spinners, 1,912,886 bales, an increase of 806,910 bales; by Southern spinners, 1,387,026 bales, an increase of 42,053 bales.

#### THE SUN ALMANAC.

The increasing scope of The Sun Almanac, popularly known as Maryland's Blue Book, is suggested in the fact that the thirty-fourth number, that for 1909, of this valuable reference book has 256 pages, or 80 pages more than the 1902 edition. It is full of condensed information of permanent interest to public officials, bankers, merchants, manufacturers, professional men, farmers, etc., not only in Maryland, but also in adjoining States and the District of Columbia.

#### ALABAMA FOUNDERS.

In reply to a request of Mr. William B. Phillips of Birmingham, that additions be made to his list of Alabama consumers of pig-iron published in our issue of January 28, Mr. D. B. Dimick, vice-president and general manager of the American Casting Co., Birmingham, Ala., informs us that his plant was not included in the list.

#### The Georgia-Carolina Power Co.

The Georgia-Carolina Power Co. has been chartered by the Georgia Legislature. It is capitalized at \$500,000, with privilege of increasing to \$2,000,000, and will build a dam 25 feet high to develop 8000 horse-power for transmission by electricity to Augusta, Ga., and cities in South Carolina. The location of the plant is at the mouth of Stevens Creek, two miles above the Augusta locks. Messrs. N. B. Dial of Laurens, S. C.; J. L. Hankinson and W. G. Lancaster of Augusta are the incorporators.

## Duty of Congress as to National Waterways.

By ALBERT H. SCHERZER of Chicago.

[Written for the Manufacturers' Record.]

Will a bond issue of \$50,000,000 a year for 10 years for the improvement of rivers and waterways ruin the United States?

The world may be divided into savage and civilized countries. One of the few savage countries remaining on this earth is that inhabited by the Dinka tribes in darkest Africa. The principal occupation of the chiefs of Government of this nation is savage personal warfare. The people have not yet progressed much above cannibalism. Little progress has been made in the improvement of transportation and the development of arts and sciences, which are the great primary agencies of civilization. The chiefs have no time or thought for conceiving and building improved roads and railroads. Even the rivers, which could be utilized as magnificent means of transportation, are neglected. Confidence between individuals has not yet been established. Differences are settled by warfare instead of courts. Therefore, the chiefs of Government cannot avail themselves of that mighty power for civilization and progress—the bond issue. The energies of the people are absorbed in destruction instead of construction—the highest ideal of civilization. If the chiefs should attempt to raise money by a bond issue the rate of interest in the money markets of the world would be prohibitive.

The United States of America, founded by the great and enlightened genius of George Washington, is today the leader of nations in civilization and progress. Enlightened courts have taken the place of destructive personal warfare. Confidence between individuals and individuals and the Government has been placed on a high plane of civilization. The Government can secure almost unlimited supplies of money in the markets of the world at 2 to 3 per cent. interest for the building up and development of its means of transportation and natural resources.

The natural resources of the United States are greater than those of any other nation, with the possible exception of Russia and China, but in these countries the governments are as yet unable to extensively develop their great natural resources.

No other nation in the world except the United States was wealthy enough to issue low interest bearing bonds and thereby build the Panama Canal. This great philanthropic work to advance the civilization of the entire world was assumed by our Federal Government without asking the financial aid of any other nation. Even should the Panama Canal cost the people of the United States \$300,000,000 to \$500,000,000, no taxpayer will ever be heard to complain, because the benefit to the world at large will far outweigh his personal contribution.

One of the principal functions of an enlightened civilized government is to protect and develop its means of transportation. The three means of transportation available in the United States are:

1. Roads.—These may be good roads or bad roads, according to their development. Good roads are economical.
2. Railroads.—Good railroads are more rapid and more economical than good roads.
3. Waterways.—Good waterways are much more economical than good railroads.

The primitive roads of the United States were crooked paths, and transportation on them was very costly. Local and State governments have done much to improve this means of transportation, but it

has not yet developed to the high standard of many European countries, such as France, Germany, England and Austria.

The second means of transportation, the railroad, has been developed to the highest standard known to the civilized world today by the genius, public spirit, enterprise and energy of great and enlightened men. Their names rank high among the benefactors of mankind. They received comparatively little aid from the Government, except the permission to organize companies and the right to appropriate limited strips of land for improvement and development. The strips of land entrusted to the railroad builders would have remained largely undeveloped and in a most primitive and backward condition had these resourceful men not availed themselves of the powerful agent of civilization, the bond issue, even at interest rates of 5 to 10 per cent. per annum, in order to secure the funds necessary to make the railroad improvements on the land entrusted to their care by the people of the United States. Their achievements by the investment of more than \$10,000,000,000 in railroads are developing the resources of the United States for civilization and progress, and our railroads are the wonder of the civilized world. The wonderful development of our railroads resulted from the wise investment of ample funds. This means of transportation is not only much more rapid, but also much more economical than transportation on roads.

The third means of transportation possible in the United States is that of transportation by water. The United States has the waters of the Atlantic and Pacific oceans, the Great Lakes and the Gulf of Mexico, together with great natural rivers penetrating into the interior of the country, the Mississippi River system being one of the greatest river systems of the world. The Federal Government has been entrusted by the people of the United States with the control of transportation by water. Under the enlightened genius of the first President, George Washington, the Federal Government appreciated the responsibility which this trust devolved upon it, and great projects for the improvement of transportation by water within the United States were conceived under President Washington's administration. These projects for the development of water transportation in the United States were gigantic in proportion to the limited means at the command of President Washington. Had his successors continued to execute this great trust as it was executed by Washington, with the much greater resources at their disposal, this most economical of all means of transportation would now be at a standard of development at least as high as that of transportation by railways, to the great benefit not only of the people of the United States, but the entire world.

It is unfortunate for the development of the United States that the minds of some of Washington's successors were so largely occupied by warfare, such as the wars of 1812, 1848, 1862 to 1865, and the more recent Spanish and Philippine wars. During this time the Government sadly neglected its duty toward the rivers and waterways within the United States, the great undeveloped means of transportation entrusted to its care by the people. Today the great river systems of the United States are almost in the primitive condition they were in when the United States was inhabited by the Indians. In some respects their condition may be even worse,

because many of the forests have been cut down, and the loss of life and property from destructive floods has become much greater. In striking contrast to the high development of the railways by private enterprise, these uncontrolled and crooked waterways entrusted to the care of the Federal Government do not reflect a very high stage of civilization. In a civilized country, such as the United States, the land is parceled out and entrusted to individuals so long as they exercise a proper dominion over the same. Should they neglect or abuse their trust, and thereby injure the lives and property of adjacent owners, they are compelled to compensate in damages. If such neglect or misuse causes the destruction of life, they are subject to imprisonment and even punishment by death, and this rule has been enforced by the courts not only in the case of individuals occupying lands, but also with reference to municipal or other corporations controlling roads or highways. It has also been enforced with reference to individuals, companies and officials entrusted with the lands used for railways. Cases of adjacent owners securing compensation for damages through negligence are very frequent, and a railroad official who would negligently build a water tank which would habitually flood out and destroy the lives of adjacent owners of land would be held responsible in the civil and criminal courts. There does not seem to be any provision in the Constitution or laws of the United States which exempts any Federal official from such responsibilities. If the law is enforced against all other offenders, especially railroad officials, why are not these laws enforced against an offending public official? The plea that a duty was neglected should not be a sufficient answer in this enlightened age. It is a well-known fact that a large number of people in the United States lose their lives through floods caused by neglected rivers annually overflowing neighboring lands. The destruction of property and wastage of more than 30,000,000 acres of fertile lands from this cause is also very serious, but the responsible parties are not held accountable, as would be the case should a railroad exercise such destruction within the territory through which its lines extend. The railroad official could not excuse himself on the ground that he had no funds or that he had to issue bonds and pay from 5 to 10 per cent. interest annually in order to maintain the property entrusted to his care, such as water tanks, embankments, etc., which would be engines of death and destruction if neglected.

The plea that the Federal Government cannot spend any funds to perform these duties entrusted to its care because it must spend annually \$400,000,000 or more for war purposes and the fruits of war is not a very sound excuse in a civilized country, because the Government official, much more easily than the railroad official, can secure all the funds necessary for these improvements by bond issues from time to time as the improvements are being made, the rate of interest being several hundred per cent. in favor of the Government. If the Constitution does not prohibit the Government from issuing bonds for the building of the Panama Canal, there is certainly nothing in the Constitution which prohibits the Government from issuing bonds for similar improvements within the United States, the performance of which duty has been entrusted to the Government for more than 100 years. It is as impossible for the Federal Government to perform these great public duties without a bond issue as it would be for a railroad company to attempt to build a great railroad without bond issues. The Federal Government has at its command

a most able organization to perform its duties to the great rivers and waterways of the United States, the Corps of Engineers of the United States Army, but these well educated and able men are absolutely powerless to do anything whatever unless provided with the necessary funds. No railroad president would expect his engineers to secure great results in railroad construction unless he provided them with the necessary funds. How, then, can the Corps of Engineers prevent the destruction of lives by neglected rivers unless they are provided with the necessary funds? One would then ask: Who prevents the funds from being supplied? Is it some foreign nation with a great army and navy that prevents these funds from being supplied? Or is the cause at home within the United States and within the control of the people?

Under the Constitution of the United States the House of Representatives initiates the ways and means of providing the funds necessary for the performance of its duty by the Federal Government, whatever that duty may be. It may be the purchase of a \$10,000,000 battleship or it may be providing \$2,000,000,000 or \$3,000,000,000 for the carrying on of a great destructive war, such as the Civil War. The House of Representatives is presided over by the Speaker of the House. In his all-powerful grasp lies the appointment of the committees. If he appoints committees that are not willing, with the advice of the Engineer Corps of the United States Army, to formulate plans for the proper control and improvement of the great rivers of the country and means for financing such works of improvement, someone is sadly neglecting his duty and opportunity. The position of the Speaker of the House of Representatives is somewhat analogous to that of the chairman of the board of directors of a railroad company. It is his duty to not only see that the House of Representatives passes without delay proper plans for the improvements, but it is also his duty to see that by bond issue or otherwise sufficient moneys are provided so that such plans can be executed by the President and his assistants. The President of the United States can do absolutely nothing until the Speaker of the House of Representatives appoints men willing to perform their duty. The President can only execute the laws when they are passed and funds are provided to execute the same.

The highest ideal for the citizen or the great official is to perform his whole duty and exercise dominion over the property entrusted to his care by the people so as to secure the highest benefits for the individual and public welfare. In providing ways and means for the performance of these trusts most wonderful results have been secured by individuals, such as improved farms, improved highways, improved buildings and improved railroads. Should we not expect at least an equal or greater improvement of the waterway property entrusted to the care of the Speaker of the House of Representatives?

It is not necessary to travel far and wide all over the earth to learn what other nations are doing to improve water transportation. Canada, our neighbor, with an unfavorable climate, less than one-tenth of the population of the United States, and with but a fraction of the wealth of the United States, has already constructed a deep-sea waterway connecting Montreal, more than 700 miles inland, by a 28-foot channel with every seaport and harbor in the world. Canada has for many years had a 14-foot waterway connecting the Great Lakes with every port in the world. It is now proposing to build a 21-foot waterway. Can it then be said that the engineers of the United States

are not able to build an equal sized or greater waterway connecting the Great Lakes with the Gulf of Mexico, or that the United States would be bankrupt in case the nation should undertake the work of controlling the Mississippi and incidentally saving from overflow more than ten times as many acres of fertile lands as are covered in all of the reclamation projects now being executed by the Federal Government?

This great deep waterway would also be the most powerful aid to the national defense. Every dollar expended within the United States would return to the people and the Government more than ten-fold. It is not the fault of President Roosevelt that these great improvements are delayed. His annual message urges immediate action. It states: "Action should be begun forthwith during the present session of Congress for the improvement of our inland waterways. Actions which will result in giving us not only navigable, but navigated rivers. The time for playing with our waterways is past. The country demands results."

In the face of such an earnest plea, how can the Speaker of the House of Representatives conceive plans for raising and expending billions of dollars for war purposes and weapons of destruction and fail to find means to provide the comparatively small amount of funds necessary to perform the plain duty of the Federal Government and build up for the United States the most economical known means of transportation and also secure a permanent priceless asset to the Federal Government for ages to come?

No delegates to Congress were required to secure the bond issues for building the Panama Canal. Resolutions backed by legions of delegates have been presented to the Speaker calling for the improvement of waterways within the United States. How many more legions of delegates will be necessary to secure action? The welfare of the United States demands the three means of transportation in their highest possible development.

There is no honor or profit in duty neglected.

Chicago, February 20.



FOR BOARD OF TRADE, LITTLE ROCK, ARK.

The structure to be 50x40 feet; four stories; electric and gas lighting; electric elevator; to cost \$20,000; architect, J. M. Whitehead.

#### Free Sites for Factories.

Charles C. Adams & Co., Empire Building, Salisbury, N. C., writes to the MANUFACTURERS' RECORD:

"We are prepared to offer free of charge factory sites with railroad frontage to manufacturers who will locate at this place. When we say sites we do not mean a few feet, but we will give in proportion to the size of the plant that is to be located. Our railroad facilities are the best, as this is a junction point of the Southern Railroad, which at all times is ready to show its appreciation of patronage by prompt service. Our labor conditions are good. We are in touch with two of the largest power plants in the South, and our weather conditions cannot be bettered anywhere."

#### CEMENT IN VARIOUS GUISES.

##### Feature of the Second Annual Show at Chicago.

[Special Cor. Manufacturers' Record.]  
Chicago, Ill., February 20.

The second annual cement show in this city, under the auspices of the Cement Products Exhibition Co., now become a permanent annual institution, was different in many respects from previous cement shows. Booths have been flimsy, and there has been no appearance of artistic accord between exhibitors. A magnificent display in the hands of men of discriminating taste would often be right alongside a tawdry display of some man intent on making sales. In this year's show the manufacturer exhibited and the salesman demonstrated, and this fine division of duties has placed cement and the cement industry at one bound in a place where the people are bound to take notice. The booths were all of a kind, with partitions of uniform height having some pretension to architectural effect. White was the predominating color, with the carvings and signs edged with gold upon a background of green. It was harmonious.

There were fountains made of concrete that had openings filled with colored glass, and inside were lights. The music from the balcony came to one's ears delightfully, and the pergola effects of the booths, with the lights and the murmuring fountain and the handsomely made seats and tables, did make one feel that the days of old Greece would return. For there were seats of many patterns, and tables also, and statues and all the outside decorations that one could want for homes, all made of concrete and with many different kinds of cement. There was none of the old-time show about the affair wherein concrete was forced to present an appearance of imitating stone. Here the cement work was avowedly cement work, and visitors realized that this is a most valuable structural material.

There were booths where stereopticons and men with vigorous voices showed what had been accomplished in the way of house building and what will be accomplished in the future. Houses so artistic as to be fit for the residence of any people upon earth, no matter what their estate, were shown upon the screens with estimates of cost that were staggering in their cheapness. With these pictures were also shown actual bids received from responsible contractors, so one could feel certain that the estimates were not wild dreams of enthusiastic architects. With many pictures were given actual costs for buildings already erected.

The skeletons of buildings were there, of course, in the shape of reinforcement for reinforced concrete, and so arranged that the most ignorant person on technical matters would appreciate the exhibit. Practically every reinforcement system was represented, and the numbers of fabrics and fabricated systems bewildered even the men whose practice is confined to this particular industry. There was noticeable an absence of many freakish systems seen at other shows.

Every block machine in the market was to be seen, with able demonstrators in charge. The *esprit du corps* among the men selling block machines was in evidence. They seemed to realize that this show is educational, and the people who "wanted to see the wheels go round" were catered to without there being apparent any desire on the part of the operators to disparage other machines. The exhibit of block machines was most interesting and instructive. Many sales were reported by men in charge, for there was a buying crowd present, but the exhibitors worked rather like teachers than salesmen. There were blocks of many shapes, sizes and

colors, giving evidence that from now on we will see better-looking concrete-block houses and fewer people will look upon the building block as being fit for foundations and for nothing else, because of its lack of artistic adaptability.

A new system of building coming greatly into vogue is one wherein the framework consists of light channels and studding, to which is fastened expanded metal or wire fabricated lath. Several coats of plaster are put on this lath and back-plastered, so that partitions of any thickness can be made. This does away with costly form work, and makes the plasterer the general contractor. Exhibits of this form of construction were in evidence at several booths.

Concrete's supplanting brick as a material for making sewers, and is replacing earthenware pipes for sewers and farm drains. There were a number of very interesting exhibits of machinery for making concrete sewers and drain tiles. These machines were at work constantly, and attracted crowds.

Getting down to how things are done, so satisfying to look at after one has viewed finished products, and so much of a bore when one does not see first the finished product, there were exhibits of more form systems than one would think possible. There were wood forms and metal forms and devices for erecting them and for taking them down. These forming systems embraced forms for shafts, tunnels, sewers, building walls and floors, and even burial vaults. These last gruesome reminders that we cannot escape cement in the end were exhibited by enthusiastic manufacturers who report an increasing popularity in their use.

Not so many waterproofing compounds were exhibited as in previous years, which shows that we are getting down to a good basis now, and that waterproofing compounds must have worth to live two years. Rubber and asphaltum linings are becoming very popular for certain classes of work, and the showing made of the methods used to accomplish the right results were instructive to a degree.

It requires tools and machinery to make concrete buildings and furniture and decorative friezes and statuary. It requires many tools and much machinery. The result is that a show attempting to give a satisfactory idea of the cement and concrete industry must have somewhere a department devoted to machinery. The results accomplished are to the foreground. It is natural. The man and woman who first take an interest in concrete are not interested in the machinery. They are interested in the decorative effects obtained. Then they become interested in the solidity of the construction and the lessened cost of insurance. Finally, they become interested in the machinery. So this show was arranged on logical lines, and was consequently of vast importance in an educational sense. In the annex we found the concrete mixers and the concrete hoists, and the wheelbarrows and the carts and the engines.

Humming, buzzing little gas engines with an asthmatic cough are necessary in the concrete industry, and manufacturers are making them especially for the concrete man. They showed them also in satisfactory number and variety, all running and coughing their heads off. They do not have to cough, but the cough is permitted in order to attract attention.

Then there was the mixer, that ran with an alcohol engine instead of a steam engine or gasoline engine.

There were hoists and derricks also, and even machines for putting cement in bags. There were pulverizers for reducing the cement to powdered form and mills for making cement. For a student the show

was a real university, for he was shown how cement was made, how it was packed for market, how it was tested by expert cement testers, how it was mixed with sand and stone to make concrete, and how it was used as a decorative plastic. He was shown how it was colored, and also shown white cement that made a concrete indistinguishable from marble. He was shown lime in many forms and its adaptability in connection with cement for so many uses that he could hardly help being bewildered. He was shown so much that the six days of the show were entirely too short, and he must depend for another 12 months upon the literature furnished in abundance by the men who exhibited their products.

To deal with such a show adequately one cannot mention all the exhibitors separately, nor was it possible to divide the show into strictly drawn divisions and mention exhibitors in each. The men who exhibited there had all more than one feature of the concrete industry to show. Many concerns had as many as a dozen things featured, and their catalogues showed that there was more in reserve. For this reason the writer appends the official list of exhibitors:

Advance Mixer Co., Jackson, Mich.; Alling Construction Co., Chicago; Allis-Chalmers Company, Milwaukee, Wis.; American Asphaltum & Rubber Co., Chicago; American Contractor, Chicago; American Lumberman, Chicago; American Steel & Wire Co., Chicago; American System of Reinforcing, Chicago; Anchor Concrete Stone Co., Rock Rapids, Iowa; Anhydrous Pressed Stone Co., Chicago; Aquabar Company, Philadelphia, Pa.; Arrowsmith Concrete Tool Co., Arrowsmith, Ill.; Ashland Steel Range & Manufacturing Co., Ashland, Ohio; Association of American Portland Cement Manufacturers, Philadelphia, Pa.; Atlas Portland Cement Co., New York city.

Ballou Manufacturing Co., Belding, Mich.; Ballou's White Sand Co., Millington, Ill.; Barton, Francis M., Chicago; Besser Manufacturing Co., Alpena, Mich.; Blaw Collapsible Steel Centering Co., Pittsburgh, Pa.; Brown Hoisting Machinery Co., Cleveland, Ohio; Burness, F. B., Kansas City, Mo.; Burrell Manufacturing Co., Bradley, Ill.

Cement Age, New York city; Cement Era, Chicago; Cement Machinery Co., Jackson, Mich.; Cement Tile Machinery Co., Waterloo, Iowa; Cement World, Chicago; Century Cement Machine Co., Rochester, N. Y.; Century Manufacturing Co., Columbus, Ohio; Chain Belt Company, Milwaukee, Wis.; Chamberlain Machine Works, Waterloo, Iowa; Chatfield & Woods Sack Co., Cincinnati, Ohio; Chicago Architectural Photographing Co., Chicago; Chicago Builders' Specialties Co., Chicago; Chicago Concrete Machinery Co., Chicago; Chicago Monolith Construction Co., Chicago; Chicago Portland Cement Co., Chicago; Cincinnati Iron & Steel Co., Cincinnati, O.; Clark Publishing Co., Myron C., Chicago; Cleveland-Akron Bag Co., Chicago; Climax Company, Chicago; Clover Leaf Machine Co., South Bend, Ind.; Coltrin-Boos Manufacturing Co., Jackson, Mich.; Concrete Age, Atlanta, Ga.; Concrete Publishing Co., Detroit, Mich.; Concrete Stone & Sand Co., Youngstown, Ohio; Cowham System of Cement Mills, Jackson, Mich.; Cropp Concrete Machinery Co., Chicago.

DeArmon-McKinney Manufacturing Co., Piqua, Ohio; Decorators' Supply Co., Chicago; DeSmet, Geo. W., Chicago; Dexter Brothers Company, Boston, Mass.; Diamond Cement Machinery Co., Toledo, Ohio; Dietrichs' Clamp Co., Little Ferry, N. J.; Dodge Manufacturing Co., Mishawaka Ind.; Dunn & Co., W. E., Chicago; Edmondson Concrete Machinery Co.,

South Bend, Ind.; Engineering News Publishing Co., Chicago; Engineering Record, Chicago; Eureka Machine Co., Lansing, Mich.

Foote Concrete Machinery Co., Chicago; Foote Foundry Co., J. B., Fredericktown, Ohio.

Garden City Sand Co., Chicago; Gauntt Manufacturing Co., F. G., Fort Wayne, Ind.; General Fireproofing Co., Chicago; German-American Portland Cement Works, Chicago; Good Roads Magazine, New York city; Groh Bros., Kendallville, Ind.

Hall-Holmes Manufacturing Co., Jackson, Mich.; Hayden Automatic Block Machine Co., Columbus, Ohio; Hill Clutch Co., Cleveland, Ohio; Hotchkiss Concrete Stone Co., Chicago; Hudson Manufacturing Co., Hudson, Ind.; Hunt & Co., Robt. W., Chicago; Huntley Manufacturing Co., Silver Creek, N. Y.

Ideal Concrete Machinery Co., South Bend, Ind.; Illinois Gravel Co., Princeton, Ill.; Illinois Improvement & Ballast Co., Chicago; Indiana Concrete Form Co., Indianapolis, Ind.; Inman Concrete Building Block Machine Co., Beloit, Wis.; Ironite Co., Chicago.

Jackson Company, F. M., Akron, N. Y.; Jackson, Inc., Geo. W., Chicago, Ill.

Kelly Island Lime & Transport Co., Cleveland, Ohio; Kennicott Water Softener Co., Chicago; Kent Machine Co., Kent, Ohio; Kent Mill Co., New York city; King & Sons, W. T., Chicago; Knickerbocker Company, Jackson, Mich.; Koehring Machine Co., Milwaukee, Wis.; Koppel Company, Arthur, Chicago; Kramer Automatic Tamper Co., Peoria, Ill.

Lagrange Specialty Co., Lagrange, Ind.; Lansing Wheelbarrow Co., Lansing, Mich.; Lehigh Portland Cement Co., Cleveland, Ohio; Lock Bar Steel Concrete Co., Chicago; Luck Cement Post Co., Aurora, Ill.

Manhattan Rubber Manufacturing Co., Chicago; Marblecrete Products Co., Akron, N. Y.; Marblehead Lime Co., Chicago; Marquette Cement Manufacturing Co., Chicago; Marsh, Geo. C., Chicago; Meather Bros. Co., Joliet, Ill.; Meacham & Wright Company, Chicago; Mercantile Bridge & Concrete Tile Co., Paris, Ill.; Miles Manufacturing Co., Inc., Jackson, Mich.; Mills, W. F., South Bend, Ind.; Miracle Pressed Stone Co., Minneapolis, Minn.; Monolith Steel Co., Inc., Washington, D. C.; Moorehouse, N. J., Waterloo, Iowa; Morris, E. T., Elburn, Ill.; Multiplex Concrete Machinery Co., Elmore, Ohio; Municipal Engineering Co., Indianapolis, Ind.; Municipal Engineering & Contracting Co., Chicago.

National Fireproofing Co., Chicago; National Insulite Co., Aurora, Ill.; National Wire Cloth Co., Sandusky, Ohio.

Ohio Ceramic Engineering Co., Cleveland, Ohio; Olmstead, G. H., Chicago; Overturf & Co., C. W., Dumont, Iowa.

Parker Hoist & Machine Co., Chicago; Parry, Wm., Crown Point, Ind.; Peerless Brick Machine Co., Minneapolis, Minn.; Perfect Concrete Brick & Fencepost Mold Manufacturing Co., Kendallville, Ind.; Post Mold Co., D. & A., Three Rivers, Mich.; Progress Publishing Co., New York city.

Raber Lang Manufacturing Co., Kendallville, Ind.; Ransome Concrete Machinery Co., New York city; Raymond Concrete Pile Co., Chicago; Republic Iron & Steel Co., Chicago; Richardson Scale Co., Chicago; Rockford Sand & Gravel Co., Rockford, Ill.; Rock Products, Chicago; Rutherford Cement Construction Co., Rutherford, N. J.

Sandusky Portland Cement Co., Sandusky, Ohio; Sanford Concrete Machinery Co., Toledo, Ohio; Simpson Cement Mold Co., Columbus, Ohio; Smalley & Trulin, Panora, Iowa; Smith Wire and Iron

Works, F. P., Chicago; Smith Company, T. L., Milwaukee, Wis.; Snell Manufacturing Co., R. Z., South Bend, Ind.; Somers Bros., Urbana, Ill.; Standard Scale & Supply Co., Chicago; Standard Sand & Machine Co., Cleveland, Ohio; Sterling Wheelbarrow Co., Milwaukee, Wis.; St. Louis Sampling and Testing Works, St. Louis, Mo.; St. Paul Cement Machinery Co., St. Paul, Minn.

Tarentum Paper Mills, Chicago; Technical Publishing Co., Cleveland, Ohio; Thinnes & Co., J. M., Chicago; Thomas Cement Construction Co., Joliet, Ill.; Thompson Company, C. H., Chicago; Toledo Wheelbarrow Co., Toledo, Ohio; Troy Wagon Works Co., Chicago; Twentieth Century Tile Roofing Co., Chicago.

United States Cement Co., Bedford, Ind.; U. S. Gas Machine Co., Muskegon, Mich.; United States Gypsum Co., Chicago; Universal Portland Cement Co., Chicago; Universal Stone Crusher Co., Cedar Rapids, Iowa.

Varney, Wm. E., Cedar Rapids, Iowa.

Wabash Portland Cement Co., Detroit, Mich.; Wadsworth, Howland & Co., Boston, Mass.; Waterloo Cement Machinery Corporation, Waterloo, Iowa; Wege Brick Machine Co., La Crosse, Wis.; Wesely, Chas., Chicago; Williams Patent Crusher & Pulverizer Co., Chicago; Wolverine Portland Cement Co., Coldwater, Mich.; Wood Electric & Manufacturing Co., South Bend, Ind., and Zeiser Bros., Berwick, Pa.

ERNEST McCULLOUGH, C.E.

#### In Kentucky Oil Fields.

[Special Cor. Manufacturers' Record.]

Barbourville, Ky., February 22.

Kentucky oil operators have been attracted to a new field lately developed in Meade county, over 100 miles from any previous development. Because of its comparative closeness to the Indiana fields, operators believe the sands of the latter districts may be proven to extend into Kentucky, and a recent good strike goes far toward bearing out this theory. During the past few weeks a large acreage has been leased by Kentucky, Indiana and Pennsylvania operators in Meade county, and much new work is in prospect for that field.

The extent of Kentucky's oil-bearing sands may be sized up from the fact that in Knox and Clay counties, over 200 miles from Meade, a similar leasing campaign is under way, and much new work will be started as soon as the spring season brings better conditions for drilling in that rough mountain country.

The completions during the winter season have been of high average capacity, and all work has been in the high-grade fields, there being a cessation of activity in the low-grade districts, few in number. Production of the better grade has averaged close to 60,000 barrel monthly. For this grade the two purchasing companies, the Standard Oil Co. and the Indian Refining Co., have quoted \$1.03 and \$1 per barrel, respectively, these prices remaining unchanged for over a year.

W. S. HUDSON.

#### Orange Cultivation in Texas.

The Texas Orange Colony of San Antonio, Texas, has been incorporated with a capital stock of \$20,000 by Messrs. A. L. Matlock, J. W. Muncey and Clark S. Packard of that city. Dispatches state that they plan to establish an extensive orange orchard near Alice, on the San Antonio & Aransas Pass Railway, planting about 600,000 trees on a 6000-acre tract of land. The improvements contemplated are reported as involving the expenditure of over \$100,000.

## FOREST POTENTIALITIES OF THE SOUTH.

By W. W. ASHE, Forester, North Carolina.  
[Written for the Manufacturers' Record.]

The Southern States produced in the years 1906 and 1907, which represent the period of maximum production, about 45 per cent. of the lumber cut of the United States. The value of the total forest products of these States for either of these years amounted to more than \$250,000,000, far exceeding the value of the total output of manufactured cotton from these States during the same period. The value of their forest products forms about one-eighth of the value of their total products. In some of these States, North Carolina, Louisiana, Mississippi and Arkansas, the forest products constitute from one-fifth to one-sixth of the total products of the States. In North Carolina more than one-sixth of the total assessed property value is embraced in forests and forest industries.

In spite of the enormous increase in the total production of lumber during the past 10 years, five of the Southern States show a decreasing cut if the census figures of 1906 are compared with those of former years, and four States show a decreasing cut if the figures of 1907 are compared with those of former years. Attention is called in the census report, however, to the fact that 28 per cent. more mills answered their requests for information in 1907 than in previous years, on account of the improved methods of collecting the data and the greater interest taken by the mills and the lumber associations in making the figures complete. This has undoubtedly given the figures for 1907 a relatively greater value than those of former years.

In Georgia the decrease both in 1906 and 1907 was nearly 300,000,000 feet below the maximum cut. In Alabama the cut decreased 235,000,000 feet in 1906 below that of the year of maximum production, although a marked rebound is shown in the production of 1907. In Tennessee a decrease of 135,000,000 feet had taken place by 1906, although this decrease was not quite so large, according to the figures of 1907.

In the years 1906 and 1907 the highest timber prices ruled in the United States, and on this account it is reasonable to suppose that the cut of every State was pushed to its maximum. This is substantiated by the fact that while several States show a decreased cut for these years, the cut increased between 1906 and 1907 more than 100 per cent. in three of the Northwestern States as well as in Mississippi.

The timber cut of the Southern States, which shows decreasing yields, will continue to decline until it reaches a point where it is equal only to the annual growth on the forest land. The old original forest growth has been largely cut in these States, and wood-using industries and consumers must in a few years depend upon the timber which is yearly produced—it might be stated as a crop—in place of the reserve accumulation of two centuries, which has sustained the mill output for many decades. If the decrease in the cut of these States continues regularly—and it will probably decrease at a much higher rate from year to year, just as that of the Lake States has done—and if these States continue to require more lumber each year to meet their own industrial needs, within two decades they will demand more timber for their own uses than they are capable of producing.

These States are at present large exporters of wood, their timber products constituting one of their chief sources of wealth, tending to maintain their balance of trade. Within two decades their ex-

ports, if still continued, can only take place at the expense of curtailed interstate need. The outlook is that not only these States, but all of the Southern States, will be confronted in the very midst of their industrial development with a very serious timber shortage.

Three of the most important Appalachian hardwoods show a decided decrease in cut between 1900 and 1907. The cut of oak decreased 16 per cent. within this period. The cut of poplar decreased 22 per cent. The cut of ash decreased 10 per cent. All of these States showing decreased cuts are situated partly within the Appalachians, and a portion of their decrease must have been in these hardwoods. The cut of pine, the standard building material, must also have decreased in several of these States, certainly in North Carolina, Georgia and Alabama.

Such a decrease in production must soon react upon some of the recently established Southern industries. The tanning industry, which is largely dependent for its supply of tannin upon certain Southern Appalachian hardwoods, has practically been developed in the South within the past 15 years. The paper and pulp industry is of even more recent development, dating back scarcely more than a decade. The furniture and woodworking industries, with at present more than \$15,000,000 of invested capital, is capable of nearly the same expansion which has marked the development of the cotton-manufacturing industry, if it is furnished with an abundant supply of raw material. The future expansion and even maintenance of all of these industries must depend upon the supply of timber which is available.

The future timber supply of the Southern States, the timber for construction and for ties, the material to supply the paper and pulp mills, the wood for the tanning and furniture industries, must be produced from the cut-over forest lands. The method of handling these cut-over lands, not only after logging, but at the time of the very first logging, will in a large measure determine the future producing value of such properties. The greater portion of the cut-over lands of the South, including both the hardwood lands, which have been either cut clean or heavily culled, and the long-leaf pine lands, present a serious economic problem. Lumbering in the past has been carried on entirely without regard for the future earning value of the forest properties, since, except in the most favored conditions, there was, even with the most economic logging, not more than a legitimate profit in the business. On practically all of the cut-over acreage the earning value of the property has been seriously reduced. There are already in the South more than 5,000,000 acres of cut-over lands, while not less than 500,000 acres are yearly being added to this area. All of this land is not permanent forest land. It is safe to say, however, that one-half of it is; the remainder is agricultural land, much of it of excellent quality. This cut-over land, on account of the condition in which it has been left after logging, and on account of additional deterioration due to frequent fires, can produce only material of the lowest grade for a great many years, such as firewood, posts and saw timber of the smallest dimension and poorest quality. For several years yet this material must be produced and sold in competition with the remaining amount of old virgin timber of much higher grade, and which can be more easily and cheaply logged. The holders of cut-over lands

which are not agricultural, especially very poor pine lands and very rough hardwood lands, are confronted with a situation which, if carefully examined, has few features of promise in it. They must expect to hold their lands from 15 to 25 years before there is a possibility of a really profitable cutting, and this must be of small and low-grade material, while at the same time they are confronted with a constant menace in the shape of forest fires.

This is the real condition which prevents owners of lands which are suited only for timber growing from regarding their properties as permanent forest investments.

Many States, notably New York, Pennsylvania (which own more than 1,000,000 acres each), Michigan, Wisconsin and Minnesota are pursuing a policy of buying up cut-over lands. The Southern States are financially unable to acquire such holdings with a view to maintaining a future timber supply, nor does such a policy accord with their theory of government. The future timber supply must come from private holdings, and the extent and condition of these holdings must determine the character and abundance of the future timber yield of the Southern States. Between one-third and one-half of the present forest area of the Southern States is suited only for forest purposes. In North Carolina, for example, 4,000,000 acres of the 10,000,000 acres of land now in forest are so steep, rough or dry as to be unsuited for farming purposes. As a matter of civic policy it is necessary to secure the highest possible earnings from these lands which cannot be used for farming purposes. The higher their value the greater their proportional part of the taxes for roads and schools, and the greater the incomes of their owners, which is spent in the community. While from an industrial point of view it is desirable that the amount of timber produced should be ample and the cost not unreasonably high for any particular grades. There will in a few years be an enormous area of cut-over lands capable of producing only firewood and low-grade material, overstocking the market with such material and failing to make the holdings profitable to their owners, and likewise failing to supply the high-grade material demanded for industrial needs. Examinations of extensive tracts in Northern Virginia, the adjacent parts of West Virginia, Maryland and Pennsylvania, which were cut over from 50 to 80 years ago, and which are the oldest cut-over hardwood lands in the Appalachians, show that in spite of the great rise in the value of timber in these sections these tracts, on account of fires and the lack of management, have failed to reproduce a valuable growth. There has been ample time for it, but the growth consists almost entirely of short-bodied defective sprouts, the result of frequent fires.

Owners are largely unable to protect cut-over lands from fires and to secure the technical skill necessary to develop them as productive properties. Industrially, it is eminently desirable that the producing capacity of the forest lands should be maintained, and that an asset with such enormous possibilities should be developed. It is impossible for owners, however, unaided, to develop them in the present state of the lumber industry, except in a few localities where the conditions are most favorable.

The States are able to further rapid development by assisting in fire protection. Some obligations undoubtedly rest with owners, since they have virtual control of an asset which, unlike railroad and manufacturing properties, cannot be duplicated, but the producing capacity of which can be easily greatly reduced or nearly destroyed by improper handling. It is on

these grounds that owners and the States could profitably co-operate.

Fire is the most serious problem which confronts the owner of forest lands, and this danger increases two or three times on lands after they have been cut over, when they are foul with the refuse of logging and drier than normally on account of the entrance of the sunlight through the broken cover. Even in the thickly settled farming section forest fires are frequent, and they increase in number, in extent and in severity in the thinly settled sections, the true forest lands.

The yearly loss from the destruction of young timber alone in the South is not less than \$3,000,000, and this loss is placed by the estimate of the Forest Service at much higher figures. Protection to property is the basis of civilization and progress, and a class of property which individual owners cannot successfully protect should be furnished by the States the necessary protection to permit the States to profit from it. If the States can assist in such protection for a period of five or ten years, a long and important step will have been taken toward establishing a basis for profitable management. If, in compensation for such assistance, owners of forest holdings on non-agricultural land would agree to cut so as to maintain the producing capacity of their investments, a second very important step will have been secured. Even to the great majority of the owners of forest land such an expression as maintaining the "producing capacity of the land" conveys little meaning. To indicate the actual possibilities of forest development, however, the conditions in North Carolina may be taken as representative. Could a well-defined forest policy have been adopted in that State 25 years ago, not only might more timber have been cut than has been during the past 25 years, but in place of a yearly decreasing cut of 35,000,000 feet, which is now taking place, there could easily have been secured by this time a yearly increased cut of more than 70,000,000 feet, with the prospect of producing in a few years more than twice the present annual cut from the existing forest area. Every year of delay, however, in adoption of such a policy means many years of loss for recuperation. It means the destruction of active capital, represented in young trees, which no amount of money can possibly replace, for only time and care can again establish them. The South today has an opportunity to actually develop its forest assets without interfering with their exploitation. Further exploitation, however, without development will take place by exacting an enormous discount from the future earnings of its forests.

### EL RENO'S GROWTH.

ANOTHER RAPIDLY BUILDING CITY IN OKLAHOMA.

[Special Cor. Manufacturers' Record.]

El Reno, Okla., February 11.

El Reno is the county-seat of Canadian county, in the center of Oklahoma. The territory adjacent to the city is one of the richest agricultural regions in the Southwest, partied by the North and South Canadian Rivers, with grazing lands capable of sustaining the herds that make the city an important cattle market. El Reno is at the intersection of two lines of the Rock Island system; the Fort Smith and Western has its own Western terminal here, and a charter has been granted the El Reno, Red River & Pacific Railway Co. to extend this line to connect with the Orient in Texas. With the completion of this extension, citizens of El Reno will be able to travel to almost any section in the State and parts of adjoining States and return

the same day. The first of a network of interurban lines has been built.

Four years ago the population of El Reno was 4250 and the amount of taxable property \$2,908,340. Today the population is estimated at 12,500 and the taxable property is not less than \$6,375,730. Bank deposits increased between January 1, 1905, and January 1, 1908, from \$765,717.02 to \$1,493,445.39.

Among the public buildings are: A courthouse, costing \$50,000; library, costing \$20,000; Irving school building, \$30,000; Central school building, \$40,000; city hall, \$50,000, and county jail, \$27,000. Other structures are the El Reno Theater, erected at a cost of \$40,000; Elks' home, costing \$35,000; seven fine churches, and a new passenger station just completed by the Rock Island Railway Co. at a cost of \$45,000. The following buildings will be completed within the year: Masonic hall, costing \$35,000; two business blocks, \$75,000; five-story hotel, \$80,000; new city hall, \$25,000. Further improvements will be five miles of paved streets, six miles of street railway, sewerage mains extended, costing \$25,000, and 100 houses to be built in the Fair Addition at a cost of \$150,000.

There are in the city two flour mills, with a capacity of 2000 barrels daily; vitrified brick plant, with a capacity of 50,000 brick per day; artificial stone manufacturing plant, washing-machine factory, iron foundries, machine shops, canning factory with a capacity of 40,000 cans per day, automobile factory, gas plant costing \$150,000, cotton compresses and cotton gins.

Besides all of these, the Rock Island Company is spending more than \$1,000,000 in the construction of modern terminals, which, when completed, will contain 60 or 70 miles of tracks, a 48-stall roundhouse, power-house and shops, and will employ more than 1000 men, representing a monthly payroll of \$125,000.

Mr. H. S. Engle, secretary of the Commercial Club, says:

"We want the people to know that we have money and are wide awake to the importance of securing more manufacturers, and have \$100,000 to offer as bonuses for bona fide manufacturers seeking location in the West. Natural gas is being piped into El Reno, and by the coming spring will be distributed all over the city. The natural gas will be furnished to the private consumer at 25 cents per thousand cubic feet, and to the manufacturer at 10 cents per thousand feet. The advent of natural gas will attract numerous manufacturers to El Reno and will assure future residents a fuel cheaper and cleaner than coal. We want it known that we are building electric street car lines, constructing five miles of additional city sewers, paving the streets, extending the water, gas and electric-light plants, for which more than \$750,000 will be paid out this spring and summer for labor and material. Our city and her citizens are practically out of debt, 97 per cent. of the homes and business buildings are paid for and unencumbered, and there is a surplus of \$1,500,000 in the banks. We are centrally located in the alfalfa, corn, cotton and wheat belt of Oklahoma, and on the main line of railroad leading to the coal, oil and natural gas belt of the State, and our facilities as a distributing point are unequalled."

Mr. F. E. Rickey says:

"We have applications daily from 50 to 75 people wanting houses to rent. We are unable to supply the demand of applicants."

ALEXANDER HELPER.

Mayors George M. Foote of Gulfport, J. W. Parker of Meridian and A. C. Crowder of Jackson are planning a State organization of the mayors of Mississippi cities.

### HANDLING ONIONS PROFITABLY.

#### Success of Organization Among the Growers of Texas.

[Special Cor. Manufacturers' Record.]

San Antonio, Texas, February 19.

The development of the Texas onion industry is one of the most interesting facts in connection with changed conditions in this section. Previous to 1900 there were no onions grown in Texas on a commercial scale. The importation of Bermuda onions was necessary to supplement the supply on which the United States depended. In 1900 George Copp, an Englishman, who doubtless was familiar with the raising of Spanish onions in the Bermuda Islands, began experimenting with the industry at Cotulla, Texas. Although successful, there was no considerable increase in the acreage until the year 1903, when some 100 carloads were shipped to market. The Texas onion immediately caught on, so that in 1905 there was 600 carloads shipped. In 1906 the acreage had increased as well as the number of cars shipped to market, so that the Southern Texas Truck Growers' Association was organized to market the product, and in that year 1000 carloads were shipped. In 1907, 1200 carloads were marketed. In 1908 the product just doubled in size, so that 2400 carloads were raised and shipped. The present year will probably see some increase over this amount.

No product of the soil has been more intelligently and successfully handled than the Texas onion, and the Southern Texas Truck Growers' Association is an organization which has been perfected to the highest degree and which forms an example of what may be done by tillers of the soil generally, provided proper and intelligent effort is given to the undertaking.

This association employs a sales manager of the highest executive ability, who works on salary and commission and earns something like \$15,000 a year. During the season 12 to 15 traveling men are employed; there are 150 brokers throughout the country, and a system is in effect by which information of all kinds is immediately available. The manager of this association is the best-posted man on the onion business in the United States; he knows market conditions everywhere, and is in position to contract the shipment of carloads to the best advantage and to secure uniformly stable prices. The membership is composed of 500 growers, who are located in Southwest Texas, the district occupying the territory south of the Southern Pacific Railway. The policy of the organization is established by the farmers themselves. The organization is absolutely free from any kind of graft. At the end of the season an auditor representing the farmers checks up all the accounts, tracing every transaction from start to finish, and every feature of the organization is run on a strictly business basis.

Until the present year the association has devoted itself exclusively to the onion industry, but this year truck growers in general have joined the association. It is proposed to handle everything that is marketed in carload lots. The association controls 95 per cent. of the trade in onions. So far the membership in other lines of trucking does not represent anything near so large a percentage. The success which has been achieved with the onion business, however, will probably suggest a similar control of trucking generally.

It is a fact that the Texas onion has practically eliminated the Bermuda from the market, and as long as the present tariff is in effect Bermuda onions and other foreign onions cannot compete with the Texas onion.

The season for the Texas onion is necessarily somewhat brief. It contains a high percentage of water, which gives it texture

and flavor, but prevents it from keeping well. The first onions appear on the market the latter part of March. Last year the first car was shipped on the 27th of March; present indications are that this year shipment will begin March 15. All Texas onions are handled within three months; a few are put in cold storage, but the market, at the maximum, does not exceed over six months. After that time the winter onions raised in New York, Ohio, Michigan, Colorado, and, in fact, to some extent in every State in the Union, are the class supplying the market. Only at rare intervals is it profitable now to import Bermuda onions, and on occasions some are shipped in from Australia, Egypt and Spain. California raises a few of the Bermuda onions, but only 100 cars were shipped out of that State last year.

Texas has a vast advantage in the matter of freight rates, and the Texas onion matures three weeks earlier than the California onion. The Texas onion is marketed in every part of North America, reaching from Seattle to Portland, Maine, and from Jacksonville, Fla., to Saskatchewan, Laredo, Texas, is the largest shipping point for onions, although there is a considerable amount of onions grown in various parts of Southwest Texas and all along the Rio Grande Valley, especially in the territory covered by the Harlingen-Fordyce branch of the St. Louis, Brownsville and Texas Railway. It is the opinion of Mr. Roy Campbell, the manager of the Southern Texas Truck Growers' Association, that the capacity of consumption has about been reached at the present time. In other words, he points out there are difficulties in crowding the consumption of onions. People who like them will buy them, but there are obstacles in the way of attracting the public generally to a more liberal consumption of the onion. His view is that the market will take only about so many onions and maintain the present prices, and in view of the fact that the season is limited, it would be impossible to maintain profitable prices should the production be materially increased.

Under ordinary circumstances the onion crop of Texas is worth about \$1,000,000 a year. The profit to the growers depends on the individual. Some growers make big money; others not so much, and still others lose.

In the details of its operation the Southern Texas Truck Growers' Association proves in many ways the usefulness of such organizations. For one thing, all the seed required for planting is bought by the association. Every year the seed is imported from the Canary Islands, and by buying direct the association saves the growers some \$25,000 a year. This year 14,000 pounds of seed was purchased by the association. Another thing, a membership in the organization gives the grower credit which he would not otherwise possess, and in the case of purchase of crates and other material this privilege is of decided benefit.

The work of this association is suggestive of improved business methods that may be adopted by the tiller of the soil with not only great advantage to the members of the organizations, but to the benefit of the country in which they operate.

ALBERT PHENIS.

In co-operation with the Tampa Publicity Club, Clyde Glenn, secretary, the commissioners of Hillsborough county and the City Council of Tampa are circulating a handsomely illustrated pamphlet entitled "Typical Tropical Tampa," telling in most graphic style of the many attractions of that Florida city and its surroundings, of its homes, hotels, clubs and schools, of its industries and commerce and of the citrus products of the county.

### RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

#### HARRIMAN AND SEABOARD.

Why the "Wizard of Railroads" May Get It—Carolina, Clinchfield & Ohio Might Follow.

One of the interesting problems of the Southern railroad situation at the present time is the future of the Seaboard Air Line. Recent rumors to the effect that Mr. Harriman would acquire an interest in the property sufficiently strong to assure his domination thereof have directed particular attention to it, and with more than ordinary concern, because of Mr. Harriman's late inspection of the Central of Georgia, which is one of his lines.

Coupled with the Seaboard rumors is another report that the Carolina, Clinchfield & Ohio Railway, that splendid new coal road which is being completed through the Blue Ridge to Spartanburg, S. C., and northward to a connection with the Chesapeake & Ohio, will also pass under his sway.

While neither of these rumors has been confirmed, there is apparently good reason for expecting that either or both may come to be true in the developments of the next year. Just at present Mr. Harriman is taking his ease at the Hot Wells near San Antonio, Texas, leading a tent life which may continue for several weeks for the purpose of restoring him to his usual health and vigor, his system, it is understood, having been run down by arduous devotion to his work. Reports from points along the line on his way to Texas and from San Antonio after his arrival there show that he has evidently made up his mind to put aside business cares as much as possible for the time being, for he has declined to be interviewed about these and other rumors, which nevertheless seem to be warranted, because to round out the Harriman lines just such a system as the Seaboard is required, and the Carolina, Clinchfield & Ohio is necessary to the Seaboard to assure it of a coal supply independently of other roads. Several months ago the MANUFACTURERS' RECORD published a map showing the railroads in which Mr. Harriman is interested and marking plainly the need for a system north and southeast of the mountains. The Seaboard would furnish this, connecting with the Central of Georgia on the south and with the Baltimore & Ohio (of which Mr. Harriman is a director) on the north.

While there does not now seem to be reason for expecting an early end to the Seaboard receivership, there might be reasons for seeking its early termination should this report be true that Mr. Harriman will take hold of the property. The Carolina, Clinchfield & Ohio, which is controlled by interests that are prominent in the Seaboard, would naturally follow the latter into the hands of the modern wizard of transportation, or, if he did not actually become interested in it, there would be such close relations with the Seaboard for coal traffic as to amount to practically a union of the two lines. The Carolina, Clinchfield & Ohio is being built with a Seaboard connection in view, and the Seaboard is looking to it to obtain an adequate coal supply for its motive power without being obliged to depend upon shipments from the mines over other railroads.

Under the receivers important improvements are being made on different parts of the Seaboard system. Necessary enlargements of terminal facilities are in progress at points on the Atlantic Coast and also on the Gulf Coast. While little track extension is being done, existing lines are being rehabilitated where necessary to bring the property up to a state

of higher efficiency and earning power. Reports of what is being accomplished are very encouraging, and promise that the near future will witness a greatly improved system as a result of the protection thrown around it by the courts.

If Mr. Harriman controls the Seaboard, according to current rumors, not to say expectations of some of the experienced ones in railroad affairs, he would obtain Atlantic coast outlets via the Illinois Central to Birmingham, the Central of Georgia and the Seaboard Air Line, reaching points on the Atlantic from Norfolk to Jacksonville and on the Gulf to Tampa.

There seems to be many circumstances tending to put the Seaboard under the control of Mr. Harriman, especially when it is remembered that he possesses extraordinary skill for building up railroad property, as shown in his handling of the Union Pacific.

#### TO TAKE COAL TO CANADA.

##### Grand Trunk Railway May Reach Down to the Chesapeake & Ohio.

A late piece of business news of particular interest to the South, because of its possible bearing on this section, is that Robert Fleming, representing English investors, has recently secured financial control of the Lake Superior Corporation. Mr. Fleming was a member of the syndicate which lately secured control of the Chesapeake & Ohio Railway and elected a majority of directors in that company in the reorganization of the board which followed the deal.

The Lake Superior Corporation is a company with \$40,000,000 capital stock and \$13,000,000 of bonds, of which latter \$3,000,000 are income and the rest first mortgage. It owns directly, or through its ownership of the Ontario Lake Superior Company, the Algoma Central & Hudson Bay Railway Co., the Manitoulin & North Shore Railway Co., the International Transit Co., the Trans-St. Mary's Traction Co., the Algoma Commercial Co., Ltd., the Algoma Iron Works, the British-American Express Co., the Algoma Steel Co., Ltd., the Lake Superior Power Co., the Tagoma Water & Light Co., the Sault Ste. Marie Pulp & Paper Co., the Michigan Lake Superior Power Co. and the Lake Superior Iron & Steel Co., Ltd.

There is said to be a demand by these and other corporations in Canada for the superior coal to be obtained from the fields of West Virginia, Kentucky and Tennessee, and it is anticipated that steps may be taken to fulfill a deal which was contemplated two or three years ago for one of the grand trunk railroads of Canada to get down into the United States by securing the Detroit, Toledo & Ironton Railroad, which would put the Canadian line in direct touch with the greatest fuel supply of fine quality in North America. The Detroit, Toledo & Ironton is one of the lines at present in a receivership whose future seems more or less in doubt. Its president is Eugene Zimmerman of Detroit, who is also president of the Ann Arbor Railroad & Steamship Lines. These two roads form a continuous route from Ironton, Ohio, on the Ohio River opposite Ashland, Ky., to Frankfort, Mich., whence steamers cross the lake, giving connection to points in the northern peninsula of Michigan and also in Wisconsin. Direct connection is made with the Grand Trunk Railway at Durand, Mich., as well as at Detroit and Toledo, and this would afford speedy and ample facilities for the shipment of coal northward to points in Canada as well as to supply the general demand at points along the lakes.

The presence of Mr. Robert Fleming in both the Chesapeake & Ohio Railway and in the Lake Superior Corporation lends probability to expectations that some deal

may be fulfilled by which the Grand Trunk will get down to a coal territory where the supply is not only of remarkably high quality, but is practically inexhaustible.

#### NORTHERN CENTRAL'S YEAR.

##### Only by Severe Economy Was a Good Net Showing Made—Freight Off 20 Per Cent.

The Fifty-fourth annual report of the Northern Central Railway Co. has been issued. This company operate 448 miles of line, extending from Baltimore, Md., northward across Pennsylvania and terminating at Canandaigua, N. Y. The general income account for the year ended December 31, 1908, shows gross earnings \$11,264,986; decrease as compared with 1907, \$1,972,511; operating expenses, including taxes, \$9,036,065; decrease, \$1,842,500; net operating earnings, \$2,106,818; decrease, \$168,085; gross income, \$3,353,686; decrease, \$169,050; net income, \$2,350,508; decrease, \$274,503; balance — after the payment of dividends amounting to \$1,606,781 and \$59,381 on car-trust principal — \$752,816. After \$600,000 was transferred to the extraordinary expenditure fund the balance to the credit of profit and loss was \$152,816; total amount to credit of profits and loss, \$2,826,272.

The equipment of the company consists of 202 locomotives, 162 passenger-train cars, 8394 freight cars, 352 maintenance-of-way cars and one tugboat.

President McCrea says that the industrial depression which began in December, 1907, continued throughout 1908, and the revenue showed a falling off of \$1,972,511, the decreased freight tonnage being 4,827,265 tons, or nearly 20 per cent., with a corresponding reduction in ton mileage. There was a decline of passenger business in volume of over 12 per cent., and in mileage of nearly 9 per cent. Owing to increased cost there was a loss of over four mills per passenger per mile in this traffic. Referring to this latter, President McCrea remarks:

"It would seem to be clear from this statement that no justification can be found for the attempts to force down by legislative enactments the rates on this class of traffic if the present facilities and comforts are still to be enjoyed by the traveling public."

After referring to the decline in freight traffic, he says it was only through severe economies that favorable net results were obtained.

The construction work during the year included the completion of the extension of grain elevator No. 3, at Canton, Baltimore, which cost over \$242,000. More than \$231,000 was spent for rebuilding freight cars. For repairs and renewals 1125 tons of steel rails and 192,837 cross-ties were used. The company purchased 282 steel underframe box cars from the Pressed Steel Car Co. to replace in part cars destroyed or sold.

#### CONTRACT FOR COAL ROAD.

##### Lane Bros. & Jones to Complete the Holston River Line.

Lane Bros. & Jones, contractors, of Baltimore, Md., and Charlottesville, Va., have been awarded the contract for completing the Holston River Railroad, which is an extension from the Virginia & Southwestern Railway from Moccasin Gap, Va., to Persia, Tenn., about 40 miles. The Virginia & Southwestern is controlled by the Southern Railway, and the Holston River road was started as an independent enterprise, but is now to be finished by the Southern. It will be a valuable road for handling coal from the Virginia and West Virginia fields to points in the South west of the mountains. Construction on it was started two years ago, but was suspended

when the panic occurred. Recently bids were invited to finish the work under the supervision of the Southern Railway's engineering department, and construction is to proceed immediately. It is expected that the line will be in use by the end of the year.

#### New Equipment, Rails, Etc.

The Southern Railway, it is reported, has ordered 80 new passenger train cars.

The Beaumont Traction Co. of Beaumont, Texas, has ordered five cars from Chicago.

The International & Great Northern Railroad has ordered five more freight engines.

The Pennsylvania Railroad has ordered 2414 gondola cars to replace equipment. The Cambria Steel Co. will build 1214, the American Car & Foundry Co. 1000 and the Middletown Car Works 200.

The New Orleans & Northern Railroad is reported to have ordered 1400 tons of steel rails from the Carnegie Steel Co.

The El Paso & Southern Railroad is reported to have ordered 6200 tons of steel from the Colorado Fuel & Iron Co.

The Santa Fe River & Cypress Lumber Co. has, it is reported, ordered 1350 tons of rails from the Carnegie Steel Co.

The St. Joseph & Grand Island Railroad will, it is reported, purchase 10 locomotives.

The Missouri, Kansas & Texas Railway is reported in the market for 30 passenger cars.

The Georgetown & Western Railway has, it is reported, ordered one locomotive from the Baldwin Works.

The Abilene & Southern Railway, Abilene, Texas, is reported to have ordered two combination passenger and baggage cars from A. V. Kaiser & Co.

The Selma Street & Suburban Railway Co. of Selma, Ala., is reported in the market for rails.

The Texas Short Line Railway informs the MANUFACTURERS' RECORD that it is in the market for steel rails, both new and relayers, and all railroad supplies. H. H. Shaner is president and P. Riesenecker secretary, at 2124 West Commerce street, San Antonio, Texas.

#### New Electric for Maryland.

An officer of the corporation writes the MANUFACTURERS' RECORD that the Wicomico Electric & Power Co. of Salisbury, Md., has a charter from the Legislature to build a railroad from Nanticoke Point to Willard, in Wicomico county, Maryland, a distance of 35 miles, with branches of 15 miles each. Capital \$200,000. The company will issue bonds up to \$15,000 per mile. It has organized and bonus taxes are paid. The stock and personal property of the company are exempt from county and municipal taxation for five years from the completion of the road, and no taxes are to be paid until the road is finished. It has a most liberal charter.

The company intends to build the line immediately, or just as soon as the finances can be arranged. Engineers who have gone over the routes projected say it will be a paying investment from the start. The officers are M. V. Brewington, president; L. W. Dorman, vice-president; H. James Messick, second vice-president; Hon. Jesse D. Price, general manager; Wm. M. Cooper, treasurer, and Mark Cooper, secretary.

#### Pawhuska to Jefferson City.

The MANUFACTURERS' RECORD is officially informed that the Oklahoma & Golden City Railroad Co. will this year build a standard-gauge steam railroad from Pawhuska, Okla., to Jefferson City, Mo., with a branch from Climax Springs to Springfield, Mo. The main line will be

about 270 miles, and the branch 70 miles long. The principal towns on the line will be Pawhuska, Bartlesville and Miami, Okla., and Joplin, Carthage, Golden City, Stockton, Humansville, Preston, Climax Springs, Brazito and Jefferson City, Mo.

The company has authorized an issue of 50-year 5 per cent. bonds secured by a sinking fund which will be created by the guarantee of either one of two financial organizations. The railroad company is arranging with Canadian brokers to handle the bonds. Engineering work will be resumed within the next week, and it is the intention to let contracts for construction in April and for supplies and equipment by the last of May or the first of June at the outside.

E. M. Dempsey, Pawhuska, Okla., is president; John A. Wimberley, Pawhuska, Okla., and L. C. Lohman, Jefferson City, Mo., vice-presidents; W. H. Reed, secretary; W. P. Burns, treasurer, and John A. Griesel, general manager, all of Golden City, Mo.

#### Knoxville to Sevierville in Progress.

Mr. W. A. Seymour, chief engineer of the Knoxville, Sevierville & Eastern Railway Co., Knoxville, Tenn., writes the MANUFACTURERS' RECORD confirming the report that construction has been resumed and saying that eight miles of the line are now covered with outfitts and the remainder of the work will be covered immediately.

This is the road from Knoxville to Sevierville, 29 miles, which is to be continued eastward to North Carolina. It is to be built in 30-mile sections until completed, but at present Knoxville and Sevierville will be connected, with probably four local stations between them, the location of which is not finally decided. The route is through a mountainous country devoted to agriculture and stock raising; it also includes timber territory. It is expected to be operating 30 miles by January 1 next.

The contractor is the Revilo Construction Co. of Knoxville, which would like to have quotations on rails and other railroad materials.

#### Selma Street Railway Sold.

The Selma Street & Suburban Railway of Selma, Ala., has, according to a report, been purchased by the American Pipe Manufacturing Co. of Philadelphia as the result of a deal closed in Montgomery, Ala. The purchaser, it is stated, owns the Selma Lighting Co., and R. L. Ellis, superintendent of the latter, will temporarily act as general manager of the railway. The Selma Street Railway was organized by F. M. Abbott, who died several months ago, and C. A. Wickersham, president of the Western Railway of Alabama, has since acted as executive. It is said that important improvements will be made.

New officers have been elected for the company, as follows: Joseph F. Keane, Jr., president and treasurer; George M. Bunting, vice-president; H. B. Hodge, secretary; James H. Dardes, general manager, all of Philadelphia. C. S. Shuford is superintendent. A member of the new board is reported as saying that one of the lines will probably be extended several miles.

#### Sapulpa & Interurban.

Mr. Daniel W. Patton, chief engineer of the Sapulpa & Interurban Railway Co., writes from Sapulpa to the MANUFACTURERS' RECORD: "We propose to build a line from Sapulpa to Glen Pool to connect with the Midland Valley Railroad, a distance of 10 miles. This line is to be run via Kiefer and directly through the famous Glen Pool oil fields. In addition to

this, we will build five miles in and around Sapulpa, and a line three miles northeast, called Tanneha. H. E. Clark of Glen Campbell, Pa., is president; B. B. Bennett, vice-president, and H. H. McFann, general manager, both of Sapulpa. There are 10 directors. Contracts will be let for grading, bridges and culverts, but the company will build the overhead work. The line traverses a hill district with a maximum grade of 2 per cent. and a maximum curvature of 10 degrees.

#### Fordyce Buys a Half Interest.

President B. C. Cage of the Stephenville, North & South Texas Railway, Stephenville, Texas, writes the MANUFACTURERS' RECORD confirming a previous report that a one-half interest in the road has been sold. Continuing, he says:

"It is proposed to extend our line south from Hamilton via some point on the Santa Fe Railroad to San Antonio, Texas, but just what the route will be and when it will be started has not yet been definitely decided on."

The press report referred to said that S. W. Fordyce and associates of St. Louis had purchased a half interest in the road and that it was contemplated to extend it northward from Stephenville as well as southward from Hamilton.

#### Asheville & East Tennessee.

Mr. R. S. Howland, general manager of the Asheville & East Tennessee Railroad Co., Asheville, N. C., informs the MANUFACTURERS' RECORD that the permanent organization of the company has not been completed. The rails are laid nearly to Weaverville, and the line will be operated by the Weaverville Electric Co. until everything is ready for transfer to the new corporation.

The line is to run from Asheville northward via New Bridge, Weaverville, Mars Hill, Paint Gap, Burnsville and Daybook to Huntdale, which is on the Carolina, Clinchfield & Ohio Railway. It has not yet been announced when construction will be undertaken north of Weaverville.

#### New Southern Pacific Loan.

The Southern Pacific Railway has decided to issue \$100,000,000 of new stock and \$82,000,000 of 4 per cent. convertible 20-year bonds. There is to be set aside of the new stock a sufficient amount to provide for the conversion of the bonds at 130. Of the bonds about \$67,000,000 will be required to cover indebtedness already incurred, including outstanding loans of about \$36,000,000, additions and betterments costing about \$3,750,000, new equipment costing nearly \$7,500,000 and new construction under way amounting to \$19,796,000. The remainder of the bonds, it is said, will be used for future betterments and additions and other corporate purposes.

#### Cairo & Norfolk Plans.

President L. W. Goode of the Cairo & Norfolk Railroad Co., 111 Broadway, New York, writes the MANUFACTURERS' RECORD: "We expect to resume our construction work in April or May at the Mississippi River end, and hope to have the first two sections (aggregating about 60 miles) completed about the latter part of October or early in November, and the third section, to Hopkinsville, Ky., by the beginning of 1910."

This road is projected to run from Cairo, Ill., to Bristol, Tenn., and eventually to Norfolk, Va.

#### The Brownsville Bridge Plan.

A letter from an officer of the St. Louis, Brownsville & Mexico Railway Co. to the MANUFACTURERS' RECORD says: "There

is no change in regard to the matter of construction of proposed Rio Grande bridge near Brownsville, Texas. The matter of bids on this structure was closed up a month or more ago, but it has not yet been determined when work on it will proceed."

The foregoing is in reference to a recent press report which said that construction of the bridge would be undertaken immediately.

#### Houston Belt & Terminal Station.

Plans are reported completed for the passenger station of the Houston Belt & Terminal Co. of Houston, Texas. The main building will be a steel-frame structure four or five stories high, and will be so built that other stories may be added. It will be a block wide from Texas avenue to Prairie avenue, facing on Crawford street, and will be about 125 feet deep. From this main building will extend the train sheds. Warren & Wetmore of New York are the architects.

#### Tampa Northern Directors.

A report from Tampa, Fla., says that Gordon Abbott, Charles F. Ayer and F. R. Sears, Jr., have been elected directors of the Tampa Northern Railroad Co., of which H. M. Atkinson is president and P. S. Arkwright, also of Atlanta, is vice-president. The new directors above mentioned are of Boston, Mass., Mr. Abbott being president of the Old Colony Trust Co.

#### The Galveston Causeway.

Mr. A. T. Dickey, City Engineer, Galveston, Texas, informs the MANUFACTURERS' RECORD that the Galveston county causeway, which will be constructed across Galveston Bay, will be about 2½ miles long and will carry four railroad tracks, two interurban railway tracks and a highway, the latter being 30 feet wide.

#### Gasoline Cars for Trackmen.

The Seaboard Air Line is reported to have ordered from Fairbanks, Morse & Co. of Chicago 18 gasoline motor cars for the road service equipment to enable the track foremen to perform their duties with greater facility and to cover more territory. The new cars will replace hand-cars.

#### Railroad Notes.

W. H. Potter has been appointed superintendent of telegraph for the Southern Railway, with headquarters at Washington, D. C., succeeding the late C. P. Adams.

The Southern Railway has issued another announcement concerning the standard and bill of lading, saying that it will be put in use on April 1, delays in preparation having prevented its adoption on February 1, as was proposed.

Reports from salesmen and the trade generally indicate that there will be a large attendance at the third annual convention at Birmingham May 12-14 of the Alabama Retail Hardware Association. The officers are Messrs. J. W. Beasley, Birmingham, president; J. U. Cureton, Dothan, and J. R. Gamble, Wetumpka, vice-presidents; L. G. Smith, Ensley, secretary, and F. M. Kelley, Selma, and C. A. Simpson, Troy, additional members of the executive committee.

Messrs. Charles D. Freeman & Co. of New York are circulating a pamphlet entitled "The Boll-Weevil—A Menace to the World's Supply of Cotton," in which is carefully traced the spread of the boll-weevil evil since its entrance into Texas in 1892. The rapidity of the spread is clearly indicated by a chart.

## TEXTILES

#### The Cotton Duck Co.

At its annual meeting last week the Consolidated Cotton Duck Co. of Baltimore, Md., re-elected Chas. K. Oliver as president, and H. L. Smith, heretofore assistant treasurer, was elected treasurer. The vice-presidents chosen were David H. Carroll and George K. McGaw; mills manager, E. W. Thomas; secretary, C. S. Green; chairman of the board, S. Davies Warfield.

The following executive committee was elected: S. Davies Warfield, chairman; David H. Carroll, G. Clem Goodrich, J. H. Wheelwright, E. A. Brinckerhoff, Thomas M. Turner and George K. McGaw.

Standing committees elected as follows: Finance—David H. Carroll (chairman), George K. McGaw and E. A. Brinckerhoff.

Cotton—Richard Cromwell (chairman), David H. Carroll and George K. McGaw.

Manufacturing—Thomas M. Turner (chairman), E. W. Thomas, Spencer Turner, James E. Coburn, C. W. Wood and George K. McGaw.

#### The Elk Cotton Mills.

The Elk Cotton Mills of Fayetteville, Tenn., will double present producing capacity, and Stuart W. Cramer of Charlotte, N. C., has been engaged as architect-engineer to furnish plans, specifications and machinery. At present the company operates 6000 ring spindles and accompanying machinery on the production of yarns. This Southern plant continuously operated during the past year, and the management has accumulated sufficient surplus to pay for the enlargement referred to. Besides this, the company has declared 10 per cent. dividends for several years. Fayetteville is near Alabama, and the Elk company has the advantages of locally-grown cotton, coal mines a few miles distant and cheap direct freight lines to the East and West.

#### The Ethel Cotton Mill.

The Ethel Cotton Mill of Selma, N. C., has been incorporated and organized with M. C. Winston, president; C. W. Richardson, vice-president; W. D. Anderson, secretary-treasurer. This company has begun the construction of a building which will be equipped with 5280 spindles and accompanying machinery for the production of cotton yarns. Contracts for this machinery have been awarded, and it will be placed in position when the building is completed. The company is now operating 60 knitting machines on hosiery production, and this output will be dyed at the plant. The yarns will be used in the knitting department, and probably 10,000 pounds weekly will be sold to other mills.

#### The Acme Hosiery Mills.

The Acme Hosiery Mills of Asheboro, N. C., mentioned last week, has completed all arrangements for the plant. This company has awarded contract to M. L. Davis for the erection of the mill building, which will be of brick, two stories high, 40x60 feet, costing about \$5000, with dyehouse and boiler and engine house not included. It will install 100 knitting machines for the daily production of 400 to 500 dozen pairs of hose, the equipment to be driven by steam power and employ from 50 to 75 operatives. The company's authorized capital is \$100,000, and \$25,000 has been subscribed.

#### A Cotton-Mill Map.

H. E. Anschutz, 29½ South Tryon street, Charlotte, N. C., has issued the pocket edition of his Carolina cotton-mill map. The map shows all cotton mills in the two Carolinas and how to reach them by rail or wire; index gives name, town,

county, number of spindles and consumption of cotton per year in bales; all hydroelectric power plants developed or perfected. It does not show towns or villages that do not contain mills, highways, small waterways and other things not necessary to its title.

#### The Mill for Zebulon, N. C.

The Southern Spinning & Manufacturing Co. of Zebulon, N. C., has engaged Fred S. Hinds, 39 Milk street, Boston, Mass., as architect-engineer for the proposed 5000-spindle plant. He is now preparing the plans. Hosiery yarns and a special fabric will be the product. The company's organization, with Archibald Meldrum as president, was reported in the MANUFACTURERS' RECORD of January 28.

#### The Dacotah Cotton Mills.

The Dacotah Cotton Mills of Lexington, N. C., will soon award contract for the construction of buildings, including the main structure 100x200 feet, dyehouse, boiler-room, etc. This company's incorporation was announced in December, and previous to then the MANUFACTURERS' RECORD announced the plans of C. A. Hunt, Jr., for the enterprise. The company plans to install 8208 spindles and 250 looms for manufacturing colored cloth.

#### A. D. Wood's Mill.

A. D. Wood of Columbia, Ala., is proceeding with the construction of his cotton mill, reported in December. He is erecting a two-story 80x240-foot building, in which he contemplates installing 15,000 spindles, and plans to lease the completed plant to cotton manufacturers. One thousand horse-power will be developed to drive the machinery.

#### The Trenton Cotton Mills.

The Trenton (Tenn.) Cotton Mills will install about \$12,000 worth of roving, slubbing, intermediate, fly frame and other equipment, contract for which has been awarded. The company is now operating 10,500 producing spindles and 3000 twister spindles. Messrs. W. P. and J. H. Hurt recently purchased a half-interest in this enterprise.

#### The Poteau Cotton Mills.

The Poteau Cotton Mills of Poteau, Okla., has been organized to build the plant mentioned last week. W. A. Campbell is president; G. H. Witte, vice-president; I. P. Clark, treasurer, and O. Layne, secretary.

#### The Cotton Fiber Co.

Messrs. R. K. Blair, C. O. Brown and J. R. McDonald of Charlotte, N. C., have incorporated the Cotton Fiber Co., with a capital stock of \$125,000, for the manufacture of cotton waste from textile mills.

#### The Inman Mill.

The Inman (S. C.) Mill has completed an addition 78x237 feet, and will install spindles and looms, but has not determined the number. It now operates 19,424 spindles and 500 looms.

#### Paper Cones and Tubes.

The Anderson Machine & Foundry Co. of Anderson, S. C., wants the addresses of manufacturers of paper cones and tubes for winding yarn on.

#### Wants Cotton Bagging.

B. A. Meador, 122 Scott street, Little Rock, Ark., wants bagging for wrapping cotton bales.

#### The Spalding Cotton Mill.

The Spalding Cotton Mill, Griffin, Ga., reported last week as to nearly double its

plant, contemplates enlarging, but has not perfected plans. The company is now operating 11,000 spindles and 375 looms, producing dobby weaves.

#### Textile Notes.

W. B. Lasley of Creedmoor, N. C., is organizing a company to build a knitting mill.

W. R. Holland of Guion, Texas, is interested in a plan to locate a cotton mill at Abilene, Texas.

The McAden Mills of McAdensville, N. C., will add 3000 spindles to mill No. 3. Contract has been awarded.

The Lagarde-Glencoe Industrial Club, Glencoe, Ala., will endeavor to form a company to build a cotton mill.

The Alden Knitting Mill of New Orleans, La., will build the proposed mill, mentioned last week, at Meridian, Miss.

The Thompson Land Co. of Huntsville, Ala., is reported as to build a woolen-blanket mill, costing from \$75,000 to \$100,000, at Elora, Tenn.

J. A. J. Henderson, J. L. Paulk, J. E. Howell and others of Ocilla, Ga., are organizing a cotton-mill company to be capitalized at \$150,000.

The report in January that J. M. Odell of Concord, N. C., will build a mill was not correct. His proposition is the same as the Magnolia Mills Co., lately noted as to install 2000 spindles.

#### LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

#### A \$125,000 Lumber Mill.

The Gulf Lumber Co. of Fullerton, La., and St. Louis, Mo., will build another mill at Fullerton. This second mill will be of steel and concrete construction, costing about \$125,000, and will have a daily capacity of 250,000 feet of lumber. The company's mills at Fullerton and Stables, La., have an annual capacity of 100,000,000 feet of lumber.

#### Large Orders for Ties.

The Germain Company, through its forwarding agent, W. L. Blocks of Tampa, Fla., is reported to have placed orders for 45,000 crossties for shipment to Northern points. This is said to be the third order which the company has placed, aggregating 208,000 ties, nearly all of which will be shipped through Tampa.

#### Kentucky Retail Lumber Dealers.

At the third annual convention of the Kentucky Retail Lumber Dealers' Association, held at Louisville last week, the following officers were elected: President, C. H. Sherrill, Paducah; vice-president, John F. Frey, Louisville; treasurer, Thos. R. Brown, Louisville.

#### Cypress or Juniper Poles.

The Carolina Electrical Co., 110 Fayetteville street, Raleigh, N. C., wants prices on 6-inch by 25-foot and 7-inch by 30-foot cypress or juniper poles in car-load lots.

#### Want Hardwood Flooring.

Sayre & Baldwin, Payne Building, Anderson, S. C., want to correspond with manufacturers of maple, oak and other hardwood flooring.

Comrades, By Thomas Dixon, Jr. Publishers, Doubleday, Page & Co., New York.

This is a dealing in the form of fiction with the working out in practical life of the theories of socialism. It is not as strenuous, either in style or in subject-matter, as other fiction of Mr. Dixon.

#### FOREIGN LETTERS

The MANUFACTURERS' RECORD is so widely read in foreign countries that we are in constant receipt of many letters from all parts of the world. Some of these letters indicate the disposition of foreigners to buy American goods, and are therefore of interest to our readers.

#### Cotton Oil, Flour, Starch, Etc.

Jacques Setton & Co., P. O. Box 278, Alexandria, Egypt, write the MANUFACTURERS' RECORD:

"We are interested in two or three lines from your country, viz., wheat flour, corn flour, starch and wire nails. Our chief drawback is the long delay which these goods take to reach us. We don't know if the South is better placed to produce competitive qualities rather of the low-graded ones, and if it has more expeditive routes. We shall be obliged if you could pass our inquiry to those interested. Ditto for maize starch. Cotton press camel hair: We don't know if there is any good source of supply for same at your end so good as to compete against the Yorkshire and Lancashire manufacturers, but do mention same urged by an advertisement in your paper. Cottonseed oil: Although we have here few concerns of crushers and refiners, American oil is very often well sold here, and we shall be obliged if you could put us in direct relations with proper refiners. It is no use going through the medium of exporters, as prices are cut so very fine that business would be then impossible. In case we should find our convenience to deal with any firm, we will then give them our references and offer conditions to ensure them against all risks."

#### Machinery Wanted in India.

L. M. Vakil & Co., Alembic Chemical Works Co., Ltd., 3573, near Old Bombay Bank, Ahmedabad, India, write the MANUFACTURERS' RECORD:

"Hearing that you supply particulars of American-made articles, we beg to inform you that we intend to open two factories as follows: (1) Washing and bleaching factory—i. e., to wash and bleach mill yarn and cloth and clothes. For this please send us full estimate of prices (d. d. free Bombay harbor) of machinery and chemicals, building expenses and capital to be invested, photos and information of daily output; also data on machines for washing and ironing coats, pantaloons, shirts, etc. (2) Factory to make screws, bolts, nuts, etc., of all kinds and of all threads. We shall thank you kindly to furnish the full estimates. Please note that we intend to give American machinery encouragement, and if yours be found suitable in comparison with those of German and English manufacturers we shall be glad to place our orders with American manufacturers."

#### American Manufactures for Russia.

Friedrich W. H. Zimmer, Semlijaenoi, Wal. No. 419, Moscow, Russia, writes the MANUFACTURERS' RECORD relative to the advantages of American manufacturers shipping their products to Russia and Siberia. He states he has made arrangements for taking care of inquiries and submitting translations to American manufacturers, besides providing translations of catalogues and other publications describing machinery and other articles made in America. Further, it is stated that he has correspondents through Russia and Siberia, among them being specialists in different branches, and he is in a position to give particulars that will interest American manufacturers. The translated catalogues can be thoroughly distributed among prospective purchasers, as Mr. Zimmer has facilities in this direction. He invites

manufacturers to correspond with a view to assisting to establish an English-Russian trade bureau and to arrange for marketing their products among the Russian dealers and consumers.

#### Wanted for Turkey's Trade.

M. N. Demirjian, care of Belfast Linen Handkerchief Co., 43 and 45 White street, New York, writes the MANUFACTURERS' RECORD:

"I will be in New York four to five weeks, and will be glad to get American makers' catalogues of machines and agents' price-lists f. o. b. New York. I am an American living in Turkey, and expect to take samples with me to present in Turkey. I like to handle agricultural implements, iron work of all kinds, automobiles, brass goods, tile machinery, brush machinery, cement-making machinery, copper-smith machinery, cordage machinery, cottonseed-oil machinery, cotton-mill machinery, engines of all kinds (two horse-power up), fertilizer, flour and grist-mill machinery, galvanized steel and iron, ice-cream machinery and supplies, complete lines for irrigating, lathes, looms of all kinds, stone-polishing and shaping machinery, safes, sawmill machinery, typewriters and washers."

#### Corrugated Metal Sheets, Etc.

Ch. Theocharidi & Co., Leo-Kosia, Cyprus, write the MANUFACTURERS' RECORD:

"We are interested in LLBB, LLBB, ABBLJL, LBB, LBB splits. We wish price per pound and weight per 12-piece rolls; galvanized plain sheets 6x3 feet—180, 190, 200 to the ton in hundredweight bundles, folded in two, of soft working up quality; galvanized and corrugated sheets Gx8/3 corrugations, 180, 190, 200 to the ton in hundredweight bundles; galvanized fencing wire, six ply, six-gauge, in hundredweight coils; galvanized staples in hundredweight kegs. Kindly give prices for the goods either directly or indirectly, with discounts and other particulars; shipments to be made c. i. f. Larnaca or Farmagusta; payment to be made in cash on arrival of goods either at Larnaca or Farmagusta, with bill of lading, through the Imperial Ottoman Bank of our city. Prices must be in pounds, shillings and pence sterling."

#### Wanted for Africa's Buyers.

Jacklin & Co., 10 Guthbert's Buildings, West Smith street, Durban, South Africa, write the MANUFACTURERS' RECORD:

"We might tell you that our special lines are novelties of every description, and we shall at all times be glad if you will place us in communication with electric, coin in the slot, musical, household and business novelty manufacturers. It gives us pleasure to inform you that after being residents in this country for over 15 years (and experiencing many changes) there is at present a better feeling on account of the pending amalgamation of the South African States, and the country having found its bedrock, based upon which permanent prosperity can only be procured. Typewriter, gramophones and typewriter accessories are always one of our special lines, as well as machinery of almost every description. Our Mr. Jacklin was the late business manager of James Brown's Wagon Works, which is undoubtedly one of the largest in this country."

#### A Letter from Chile.

Orchard Hermanos, casilla No. 20, Antofagasta, writes the MANUFACTURERS' RECORD:

"We may state that, apart from our foundry business, we have also an importing section, and are sole agents for the American Pulley Co., Philadelphia, and

for Messrs. James Leffel & Co., Springfield, as we are in good position to handle all classes of machinery in this country and Bolivia."

#### Bar Iron for Bedsteads.

John W. Nolte, Rua de S. Juliao, 48, Lisbon, Spain, writes the MANUFACTURERS' RECORD:

"I am interested in bar iron used in making iron bedsteads, and I should be under many obligations to you if you would have some first-class firm in that line make me an offer. Price would have to be quoted c. i. f. Lisbon."

#### Progress in Palestine.

Samuel Hurvitz, importer and exporter of Jaffa, Palestine, sends to the MANUFACTURERS' RECORD samples of papyrus shoots, and says that they are exported to England in 1000 lots and used as material for paper. He also sends plans for a commercial school building at Jerusalem, to cost about \$7500; for a high-school building at Jaffa, to cost about \$30,000, and for a quay at Jaffa 3000 meters long, to cost between 472 and 643 francs per meter, according to whether the masonry of the foundations is in mortar immersed under water after preliminary draining or is in rough ashlar and hydraulic cement, with preliminary dredging and draining. He adds:

"A house built of domestic clay and in the usual Arabian manner here and intended for a girls' high school, costing more than \$25,000 for its two stories, collapsed through the weight of its roof. The public, already treated to similar accidents, insists upon more modern system of building, and would prefer reinforced concrete construction."

#### Georgia Diversification.

Illustrative of the possibilities in diversified farming in Georgia is a detailed statement sent to the MANUFACTURERS' RECORD by W. H. Leahy, general passenger agent of the Atlanta, Birmingham & Atlantic Railroad, of results obtained by J. S. Byrom & Sons on a farm on the edge of Byromville, 10 miles south of Montezuma, on the line of his railroad. The farm of 1200 acres operated 20 plows. From it were sold products to the value of \$8,740.98, leaving on hand at the close of the year's business products valued at \$3,099.50. Among the products sold were 69 bales of cotton for \$2831.61; oats, \$1376.85; 100 hogs, \$1044.92; cottonseed, \$344.45; beef, \$145.99; rye, \$91.88; milk and butter, \$91.70; seed corn, \$7.34; wheat, \$4.75; fodder, \$3; peavine hay, \$907.46; mixed hay, \$313.59; oat straw, \$273.84; soja bean hay, \$238.66; rye straw, \$46.51; seed cane, \$10.72; peaches, \$809.49; watermelons, \$82.56; syrup, \$59.86; cabbage plants, \$3.34; turnips, 35 cents, and sweet potatoes, \$2.11. On hand at the close of the season were corn valued at \$956.25; 8 cows, \$200; 9 calves, \$54; 69 shotes, \$172.50; 16 brood sows, \$128; 1 boar, \$12.50; barnyard manure, \$200; oats sowed, \$450; seed oats, \$4; rye sowed, \$120; field peas, \$45; sweet potatoes, \$100; 605 bushels of various varieties of cottonseed, \$181.50; ground peas, \$15; melon seed, \$5; seed cane, \$40; soja beans, 75 cents; 3 tons sheaved oats, \$140; 5 tons fodder, \$100; 10 tons oat and rye straw, \$35; 2 tons shucks and mixed hay, \$10; 3 acres in cabbage, \$30, and one acre in onions, \$10.

The official report of the seventh annual convention of the Hardwood Manufacturers' Association of the United States, Lewis Doster, Nashville, secretary, has been published in attractive booklet form, which will be found convenient to all members of the trade.

## MECHANICAL

### Inlaid Slate for Roofing.

Attention is called to inlaid slate for flat roofs, or roofs not steep enough for roofing nailed on the regular way. Inlaid slate is genuine natural slate sawed into small squares closely set and imbedded into a layer of high-melting asphalt on regular roofing felt. It is made in units or sections, measuring one and one-half square feet, and placed in small crates ready for shipping. Each crate contains 25 square feet and weighs 60 pounds, ready to be hoisted to the roof before being

holes average 15 feet or deeper, and in many instances much shallower depth.

The machines for this work are built on the same general plan as that used for well drilling, except in the tool equipment and general design.

The tools for blast-hole drill are made very heavy and substantial to withstand the hard usage to which they are subjected. The steel used in the bits should be of the very best quality, joints perfectly fitted, and the very best material used throughout.

In many of the limestone quarries the work is most severe, and the rock (besides

exceptionally rough, the cost was somewhat higher than usual, on account of frequent moves, holes being but 15 feet deep.

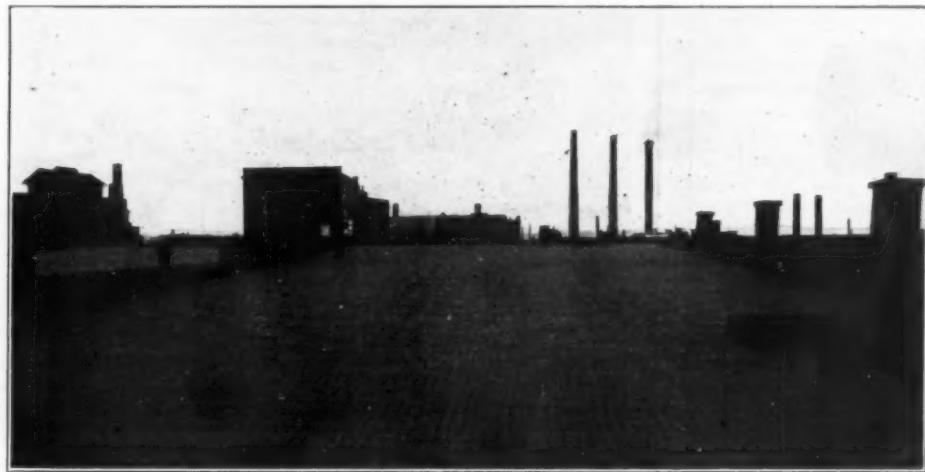
The cost of drilling 2918 feet three-inch holes for Detroit Contracting Co. at Navarre, Mich., in clay and limestone, average depth of holes 185 feet, was 10½ cents per foot. Steam was furnished from a stationary plant.

The saving in cost of drill work on deep holes with a machine of the well-driller type does not represent the real economy, while there is some considerable saving on this item. The real point of economy on the large charges which throws out

enable shipping, hauling, and handling with the utmost economy and convenience because of the "knock-down" feature, and they are easily set up and installed by the use of a few bolts.

They are made of heavier gauge material than usually adopted, and this, with the lateral flanges along both sides and the circumferential reinforcements supplied by the lapping break joints at intervals of a foot, make them amply strong.

Another strong feature is that they are made of a special analysis iron known commercially as "No-Co-Ro" metal. Ordinary galvanized sheets are more or less



FACTORY ROOFED WITH INLAID SLATE.

ing opened. For waterproofing the roof is first covered with a layer of building paper, then three thicknesses of saturated roofing felt, and hot pitch mopped in between the layers. This waterproofing is nailed to the roof. The roof, now made waterproof, is covered with a thick coating of high-melting asphalt, and the units or sections of inlaid slate are imbedded in it. The inlaid slate roofing is practical for various kinds of structures, and is claimed to embody such factors as will appeal to discriminating architects, contractors and owners of buildings. Inlaid slate is manufactured by the Inlaid Slate

being extremely hard) is frequently full of crevices, and when striking upon the wall of a crevice, unless the tools are well made, the bits will either bend or break. Too much care cannot be used in selecting a first-class outfit for work of this character.

It is necessary that the outfit be light and portable to facilitate moving from one hole to another.

The traction machine is preferable for work of this character, as the holes are usually shallow and frequent moves being necessary no time is lost in getting from one hold to another.

A machine so designed that either cable tools or contractors' special rod tools can be used with equal success is an advantage, as in some instances the cable tools are best adapted for the work, as in limestone work or other similar rock which cannot be sprung, while in all other mate-

the material in better shape for handling and at a price per cubic yard that cannot be approached by the old method of taking it out in benches.

There are also other things to be considered. Small shots are constantly interfering with the laborers, and if shooting near machinery which must be protected considerable time is lost in getting ready for the shot, putting up protecting timbers or removing machinery from the ground; also in moving the protecting timbers after the shot is fired, which must be done more frequently in the case of small shots in getting the same amount of material as in large ones.

It is the writer's experience that some machines built for this purpose are too heavy and cumbersome. A top-heavy machine for quarry or railroad work is dangerous and unwieldy to handle, as the ground is frequently very rough, and the

ACME CORRUGATED METAL CULVERTS.

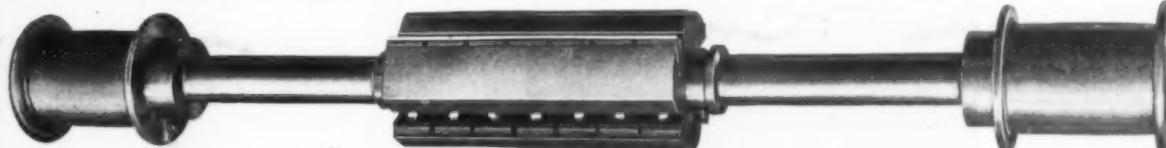
susceptible to the corrosive action of dirt, ashes, salt water and the influences which they undergo when imbedded in the earth. Tests conducted in connection on "No-Co-Ro" metal along lines laid down by the United States Government and various technical institutes and in accordance with the recommendation of the American Society for Testing Material prove conclusively that it is the metal of a superior character and remarkably free from the impurities in iron which tend toward corrosion.

An accompanying illustration indicates the ease with which Acme culverts are handled.

### The Shimer Blade's Cylinder.

Herewith is illustrated the Shimer blade's cylinder, a tool for surfacing, heading and siding, lately put on the market by Samuel J. Shimer & Sons, Milton, Pa.

This new cylinder provides for the use of thin blades of high-speed steel, which when properly tempered and treated serve for one or two days of work on hard maple, oak or hickory. Knives made of this material in the old, heavy slotted fashion would be too costly to use owing to the first cost of the steel and the trouble in working it, yet the expense for the thin



THE SHIMER BLADE'S CYLINDER.

rials the rod tools are best adapted, as three-inch holes have many advantages over larger holes from point of economy in drilling, prevents caving in loose material, and the small holes can always be drilled at much less price per linear foot than the larger sizes, and the only reason for drilling large-size holes is to take care of sufficient explosive to do the work in the initial charge.

Interesting cost data has been furnished by Lorimer & Gallagher on their drill work at Ellensburg, Washington, using a rod drill in basalt rock on holes averaging 25 feet. The total cost of 1352 feet three-inch hole was 15 cents per foot, which included moving machine and all delays.

The cost submitted covering work done by the Kentucky & Tennessee Railroad Co. at Stearns, Ky., using the same type of drill and three-inch holes in clay, shale, sandstone and limestone, 1095 feet, was 14 cents per foot. The surface being ex-

machine should be built low to the ground, with all the weight as near the ground as possible. Machines using walking-beams are of the objectionable type, as they make the outfit top-heavy and easily overturned.

### Acme Corrugated Metal Culverts.

If the demand which is being made upon the Canton Culvert Co., Canton, Ohio, for its Acme corrugated metal culverts (nestable) may be used as a criterion by which to judge, that company feels certain that corrugated metal culverts are recognized as among the best underground water conductors available.

The company claims for this culvert that while it is cheaper than cast iron, even cheaper than tile, terra-cotta, etc., in the "long run," though perhaps not so in first cost, it is more desirable in many particulars than any other kind of culvert.

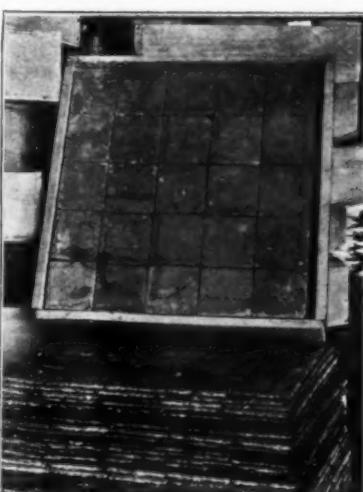
Acme culverts are so constructed as to

blades does not exceed that of the ordinary machine knife.

The thin blades of this head are reinforced by special knife-holders, which fit snugly in grooves made in the cylinder, enabling the blades to withstand the strains to which they are subject during operation. These knife-holders are made of tool steel and form part of the chip-breaker, which when worn or injured may be replaced without discarding the cutterhead or causing delay and inconvenience.

These blade's cylinders have superior advantages in point of simplicity, durability and efficiency. The blades may be kept in good working shape with less grinding, less trouble in setting and fastening to the head. They are also less liable to get out of balance, owing to the lighter weight of the knives used.

The ease by which the chip-breakers can be renewed and the absolute security of the thin blades when reinforced with the



INLAID SLATE IN CRATE.

Co. of Pen Argyll, Pa., and offered to the trade by Frank A. Knowles & Co., 308 North Holliday street, Baltimore, Md. They are agents for the Southern States. Herewith are illustrations of inlaid slate in crate ready for shipment and a factory-roofed with inlaid slate.

### Drilling Blast Holes.

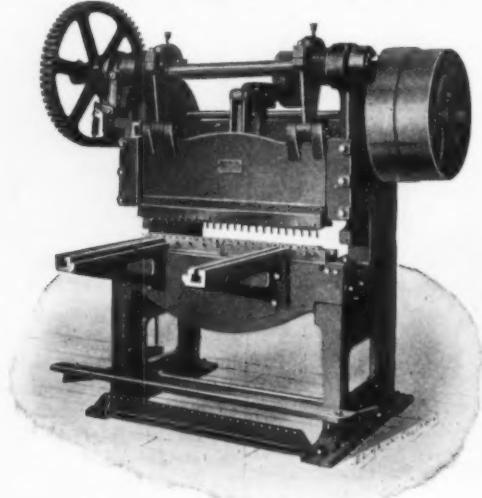
By B. G. COPE.

The well driller has gained a permanent place among contractors and quarrymen for blast hole drilling, and is being adopted on all work when the depth of

holding clamps, together with the many other advantages which will be apparent to the wide-awake woodworker, makes it seem certain that this is going to be a favorite tool wherever good work is desired.

#### New Bertsch Gang Punch.

An accompanying illustration represents a new gang punch manufactured by Bertsch & Co., Cambridge City, Ind. On this machine the punches and dies can be arranged for either universal or independent adjustment. Each machine is provided with a stripper properly designed for the particular work for which it is to be



NEW BERTSCH GANG PUNCH.

used. The machine is also built with the same automatic clutch that the manufacturers use on their heavy gate shears. This clutch is noiseless, positive and reliable in its action.

The patterns and shafts for each machine are properly figured for strains and stresses, and the bearings and gears have liberal proportions.

This machine is built in all standard sizes.

#### Cleaning Textile Machinery.

In textile mills, where the lint and dust accumulating on the machines and walls form an extremely inflammable substance, the necessity of thorough cleaning is of

the time being used for the shifting of the hose.

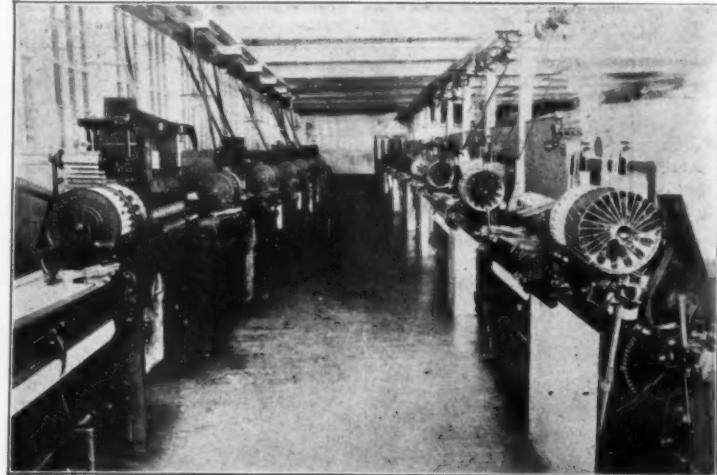
The piping in this factory is arranged so that the suction of the compressors is piped to the outside atmosphere, where cool, dry air is obtainable. The main supply pipe crosses outdoors from the machine shop, where the compressors are located, to the factory. There is a distance of about 20 feet between the buildings. In this space is installed a cooling coil to condense all moisture possible. A trap for the condensed moisture is placed in the factory close to the wall, through which the air main enters. This results in removing all excess moisture from the air,

air pressure within certain prescribed limits.

#### Draper Company's Exhibition Weave-Room.

Managers of textile mills using looms will be interested in the accompanying illustration of the exhibition weave-room of the Draper Company, Hopedale, Mass. All the looms are equipped with warp and filling, and in condition to be operated at short notice. They include a great variety of weaves as to the goods and a large share of standard Draper devices as to mechani-

goods, light duck; 50-sley, 40 picks; No. 10 two-ply warp, No. 14 two-ply filling; No. 11, 90-inch L model loom; goods, wide sheetings; 64-sley, 72 picks; No. 22 warp, No. 21 filling; No. 13, 32-inch special E model loom; goods, pillow tubing; 64-sley, 76 picks; No. 28 warp, No. 36 filling; No. 14, 32-inch K model loom; goods, fine lawns; 88-sley, 80 picks; No. 60 warp; No. 85 cop filling; No. 15, 28-inch Special E model loom; seamless grain bags; 25-sley, 22 picks; No. 7 two-ply warp, No. 31 two-ply filling; No. 16, 30-inch E model loom; goods, warp sateen; 110-sley, 72



DRAPER COMPANY'S EXHIBITION WEAVE ROOM.

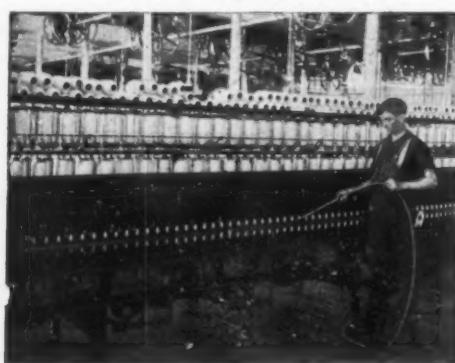
cal construction. Among them are the following:

No. 1, 32-inch E model loom; goods, cotton worsted; 50-sley, 42 picks; cotton warp, No. 26 two-ply worsted filling; No. 2, 32-inch E model loom; goods, ginghams (stripes); 80-sley, 88 picks; No. 50 warp, No. 56 filling; No. 3, 36-inch E model looms; goods, filling sateen; 64-sley, 130 picks; No. 28 warp, No. 36 filling; No. 4, 32-inch H model loom; goods, corduroy; 48-sley, 300 picks; No. 26 warp three-ply, No. 36 filling; No. 5, 40-inch E model loom; goods, fine lawns; 88-sley, 92 picks;

picks; No. 22 warp; No. 21 filling; No. 17, 36-inch E model loom; goods, cotton flannel; 44-sley, 48 picks; No. 21 warp; No. 10 filling; No. 19, 28-inch E model loom; goods, denim; 68-sley, 48 picks; No. 9 warp, No. 9 filling; No. 20, 64-inch D model loom; goods, sheetings; 68-sley, 72 picks; No. 22 warp; No. 22 filling.

#### The Clyde Hoisting Engines.

One of the new contractors' hoisting engines offered by the Clyde Iron Works of Duluth, Minn., is illustrated herewith. This company has recently included in its



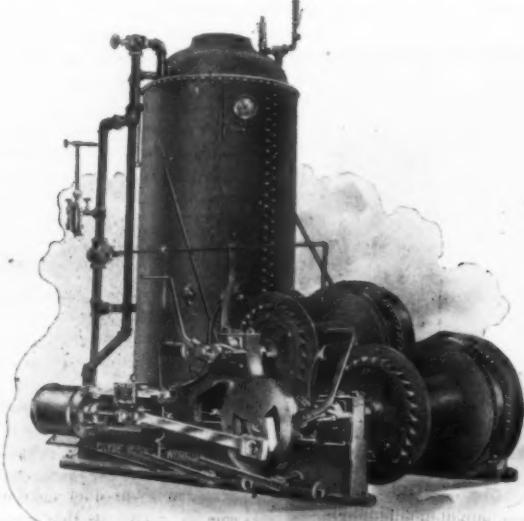
CLEANING TEXTILE MACHINERY BY COMPRESSED AIR.

prime importance. Probably no more effectual means of accomplishing this has been devised than the use of a jet of compressed air.

In an accompanying illustration is represented a spinning frame undergoing a cleaning by this method. In the New England factory in which this photograph was taken the spinning frames were cleaned by two boys working together, one on each side of the frame; thereby the lint removed from one side will not blow over to the other side. Each frame has 256 spindles; it takes the boys seven minutes to clean one frame, and they clean seven frames an hour, the remainder of

the day.

burg, Pa. The compressors are the same in nearly all details as those furnished with the well-known Westinghouse air-brake equipments, in which severe service their performance has been characterized by reliability and efficiency. The plant consists of two belt-driven compressors, with automatic governor, storage tank and accessories. They are particularly well adapted to the class of work described, being simple, compact, easily installed and requiring little attention. The wearing parts are all enclosed and protected, but quickly accessible. By the use of the governor the operation of the compressors may be made entirely automatic, keeping the



A CLYDE HOISTING ENGINE.

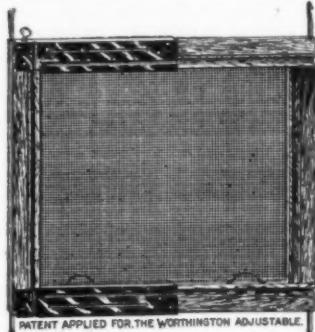
No. 80 warp, No. 120 cop filling; No. 6, 34-inch K model loom, with 20 harness dobby; cloth, figured dress goods; 80-sley, 84 picks; No. 50 colored warp, No. 56 filling; No. 7, 40-inch E model loom; goods, sheetings; 80-sley, 92 picks; No. 28 warp, No. 36 filling; No. 8, 28-inch, E model loom; goods, standard print cloth; 64-sley, 64 picks; No. 28 warp; No. 36 filling; No. 9, 64-inch D model loom; cloth, worsted dress goods; 42-sley, 48 picks; No. 28 two-ply warp, No. 28 filling; No. 10, 40-inch special D model loom;

regular product (steam fog-handling machinery) a full line of hoisting engines for general use by contractors, and announces that the equipments embody the various features required for hoisting purposes, as well as for coal handling, pile-driving, dredging, excavating, etc. The improved features of the Clyde hoisting engines are the extra long crosshead bearing, steel gears, steel ratchets on the drums, and valve construction giving a maximum of power with a minimum consumption of steam. All the bearings are

heavy and extra long, with all details ensuring the most service with the least wear. The Clyde Iron Works recently completed a new plant, covering several acres of land, equipped for building over 600 hoisting engines each year, in addition to the company's regular logging machinery. The company has a branch office at 421 Carondelet street, New Orleans, La.; at Memphis, Tenn., and other cities.

#### The Worthington Roller Screen.

The Worthington Roller Screen Co., Baltimore, Md., manufactures an improved window screen of recent invention. The Worthington lift screens are adjustable for six inches, and when erected to fit the window they become solid and of stationary width, and are raised like the window, running on a bead. This feature permits of lift screens being carried in stock ready for immediate use, and saves expense of manufacturing to order, cost of erection and trouble. Moreover, these screens can be removed from one window to another or to another house with little trouble, doing away with the necessity of procuring screens to fit the various-sized



THE WORTHINGTON ROLLER SCREEN.

windows of different houses. They are equipped with metal tongues or slides, in order to overcome binding, sticking or swelling, and there is a spring in the tongue to hold the screen up. The adjustment is so arranged that it is invisible, giving the general appearance of a made-to-order screen. The cloth used in these screens, which are made of highly finished hardwood, golden oak or mahogany finish, is of specially-treated linen mesh, serviceable in coal, sulphur and seacoast sections. (See accompanying illustration.) The screen comes in four widths—22, 28, 34 and 40 inches, adjustable for six inches and opening to 28, 34, 40 and 46 inches, and three heights—26, 31 and 36 inches.

#### "Kesco" Steel Plates and Shapes.

There is an ever-increasing demand for special steel plates and shapes, and manufacturers have given due attention to their



DIAMOND PATTERN "KESCO" PLATE.

manufacture. Methods of building construction during recent years have enlarged that demand and established an extensive market for the steel products in reference.

They are used as floor plates for floors and stairways in buildings, engine and boiler rooms, power plants, mills, factories, breweries, fire-escapes, doors, bridges, war and merchant vessels, and for all inside and outside work where good appearance is desired in connection with a roughened surface to prevent accidents from slipping, to resist wear and to ensure safe and light construction at the lowest possible cost.

The "Kesco" wrought-steel floor plates are made by the Keystone Steel Co. of Warren, Pa., which refers to them as follows: "Kesco" plates are of such strength that a five-sixteenths-inch plate weighing 13½ pounds per square foot will carry 222 pounds on a three-foot span. In addition to this there is, of course, the saving to contractors in the fact that they have 30 per cent. less material to handle, and the further fact that the floor and stair supports, having to carry so much less load, can be lighter—a point of economy.

From a point of safety "Kesco" plates are more than satisfactory, being made of



RIBBED PATTERN "KESCO" PLATE.

open-hearth boiler steel having a high ductility, consequently would sag and bend when overloaded, giving ample warning of the impending danger. Cast-iron plates have to be drilled, whereas "Kesco" plates can be punched with an ordinary structural steel punch or cut with a cold chisel. Heretofore these plates were made by contract, but the trade has grown to such an extent that to properly serve customers and give orders the attention they require the Keystone Steel Co. has bought property in Wilmington, Del., and built mills for the manufacture of these plates, the mills being larger and better adapted to the manufacture of the plates than were before in existence.

The vice-president of the company has had an extensive experience in floor plate manufacture, and has installed appliances which are entirely new and which are very effective in producing flat plates. Two accompanying illustrations are views of "Kesco" diamond and ribbed patterns.

#### Power From Coke Oven Gas.

While the adoption of gas engines operating on by-product coke oven gas is becoming active in this country, Japanese industries are also recognizing its advantages. The Furukawa Coke Works, Japan, recently ordered, through Takata & Co. (Japanese agents for Westinghouse interests), an extension to their present gas-engine plant, which has been in service for some time at the coke works. The equipment ordered is a Westinghouse vertical single-acting gas engine. This order, although not of large size, illustrates the recognition of the advantages of the gas-power system and illustrates dependence which the Japanese people place in American-made machinery. A similar equipment has been ordered by the Imperial Printing Office of the Japanese Government, although not to operate on coke-oven gas.

Engines of the same size and type have been in operation for several years in the United States at the works of the Semet-Solvay Company, Syracuse, N. Y., and at the Otto Coke Works, Camden, N. J. The most important application of by-product coke-oven gas has occurred at Lebanon, Pa., where there are now located two plants aggregating several thousand horsepower. Both of these employ the Westinghouse horizontal double-acting type gas engine, solid coupling to alternating current generators for power, light and traction service. All of the equipments are of standard Westinghouse construction, and one of these plants which has been operating for over a year has thoroughly proven its adaptability, without requiring special design. This plant regularly operates on run-of-oven gas, ranging from 50 to 65 per cent. hydrogen and 1 to 2 grains of sulphur per cubic foot. This plant is located at the Lebanon works of the American Iron & Steel Manufacturing Co. The second plant under construction is located near Lebanon, at the works of the Cornwall Ore Banks, otherwise known as the Pennsylvania Steel Co., adjacent to the extensive plant of the Semet-Solvay Company.

#### The Western Electric Cable Plant.

One of the specialties of the Western Electric Co. of Hawthorne, Chicago, Ill., is the manufacture of cables, and the company's plant for this purpose is claimed to be the largest in the world. The output of this plant is known for its high insulation resistance and low capacity between conductors wherever cables are used. Each copper conductor in the cable is separately insulated by a machine especially designed for the purpose. All overhead shafting, pulleys, belts, etc., are eliminated in the

Okra stalks which weighed green 28,000 pounds. Okra loses 60 per cent. in weight in drying and curing. Five tons of dry okra stalks will yield one ton of fiber, worth \$60 per ton.

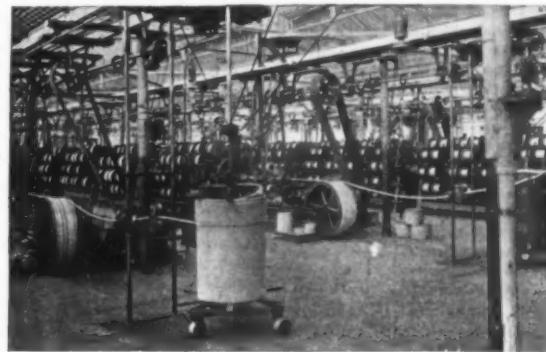
Pulp for the manufacture of paper similar to and of a quality equal to the okra pulp in color and strength sells at the mill for \$42 per ton. Making it from okra will cost \$30. Newspaper which is equal to that which can be made from okra sells for \$56 per ton. Made from okra it will cost \$40. Book paper of as good quality, finish and strength as this sample sells for \$80. Made from okra it will cost \$50 per ton.

A mill to manufacture pulp only will cost, exclusive of building and power plant, \$20,000. A mill to manufacture pulp and also extract the fiber will cost, exclusive of power plant, \$26,500. A mill to manufacture pulp and extract the fiber and spin into twine will cost \$33,000; to make into cotton bagging also, \$35,000, exclusive of power plant. A mill to manufacture paper, twine and bagging can be built complete, including buildings and power plant, for \$72,000.

It would mean the cultivation of 5000 acres of okra to keep a mill busy turning out 20 tons of finished pulp or paper a day.

#### To Finance Development.

The Pee-Dee Trust Co., originally incorporated under the name of the Eastern Carolina Title, Trust & Guaranty Co., has been chartered with James D. Evans, P. A. Wilcox, Sanborn Chase and F. L. Wilcox, all of Florence, S. C., as board of corporators, for the purpose of aiding in the development of the natural resources of the northeastern part of South Carolina within the Pee-Dee section, consisting principally of the counties lying within the valley of the great Pee-Dee River.



IN WESTERN ELECTRIC CABLE PLANT.

plant, permitting the machines to operate at maximum efficiency and resulting in low cost of production. All Western Electric cable insulation is carefully tested to make sure that it meets the most rigid requirements. The company issues an illustrated booklet describing its cable department, one view of which is presented herewith. This view represents the stranding machines and the cables in process of being formed into core. In the foreground the cable core is being wound automatically upon an iron truck previous to being dried in an oven.

#### Paper from Okra.

Mr. H. Burns, secretary of the Chamber of Commerce of Macon, Ga., has sent to the MANUFACTURERS' RECORD samples of the fiber of the okra plant and of rope made from the fiber, together with paper made from the pulp of okra stalks. These stalks were grown upon the farm of Mr. John T. Moore of South Macon, and the paper from them was manufactured by the Columbian Paper Co., Buena Vista, Va. On the paper, which is of excellent quality, are printed the following statements:

An acre of average land in the swamp near Macon produced last season a crop of

and its waters. Ten counties in that section produced in 1908 \$15,800,000 worth of cotton and seed, \$10,050,600 of corn and \$2,750,000 of tobacco, to say nothing of truck, forage, potatoes, cattle, swine, poultry and dairy products and lumber. The new trust company, whose charter provides for capital stock of \$50,000, to which is to be added a subscription of \$50,000 surplus, proposes to engage in a general banking business to guarantee title to real estate and the principle and interest on real-estate mortgages, to establish a savings bank department, to maintain warehouses and safe deposit vaults for the safe-keeping of valuables of every description, to deal in real estate and in corporate securities and to accept public and private trusts of various kinds. The principal office of the company will be at Florence, Ala. The company will organize as soon as the capital and surplus is fully subscribed and the requisite 50 per cent. of the capital has been paid in.

A dispatch from San Antonio says that a taxicab company with \$25,000 capital has been organized there by Barclay Andrews and Robert Maverick, and the new vehicles will soon be put in use.

# Construction Department

## TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

### EXPLANATORY

The MANUFACTURERS' RECORD **seeks** to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

### ADDRESS FULLY

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

### WRITE DIRECT

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

### BRIDGES, CULVERTS, VIADUCTS

Atkinson, Ga.—Bids are being asked for construction of steel bridge across Great Satilla River at Ammons Ferry, near Atkinson; structure to have two steel spans of 100 feet each, and approaches 144 feet; total length, 344 feet. Address Ira M. Raybon, clerk Superior Court, Jesup, Ga.

Beaumont, Texas.—Gulf, Colorado & Santa Fe Railroad, C. F. W. Felt, chief engineer, Galveston, Texas, will, it is reported, expend about \$150,000 in repairing bridges and trestles along line from Beaumont to Somerville and Beaumont to Center.

Camden, Ark.—City and Ouachita county will construct steel bridge over Ouachita River to cost about \$50,000. E. H. Carson, Mayor.

Camden, S. C.—Kershaw county contemplated erection of steel bridge over Wateree River. Address M. C. West, Supervisor Kershaw county, Camden, or S. R. Adams, County Commissioner, Camden.

Columbus, Ga.—City proposed issuance of \$75,000 of bonds for erection of concrete bridge across Chattahoochee River; M. M. Moore, City Clerk.

Denison, Texas.—City is considering construction of viaduct costing about \$30,000 to connect south part of city with business section. Address The Mayor.

Doswell, Va.—P. St. J. Wilson, State Highway Commissioner, Capitol Building, Richmond, Va., has prepared plans for rebuilding Fox's bridge over North Anna River, about two miles from Doswell; of steel, with concrete supports; structure is to consist of one span 140 feet, with approach 120 feet (eight spans, 16 feet 1/2 inches); bids, to be received until February 26, as lately stated, are to be made on whole bridge of steel, and on 140 feet steel and repairing present wooden approach; R. O. Wortham, Supervisor and Commissioner Caroline county, Hanover, Va.

Franklin, Texas.—Robertson county will soon let contract for erection of steel bridge across Brazos River; cost, \$10,000 to \$20,000; Ben C. Love, County Clerk. (Recently noted under Hearne, Texas.)

Harrisonburg, Va.—Bids will be opened April 5 for construction of steel bridge for Bushley Bayou and for repair of steel bridge at Jonesville, La. Address H. W. Bethard, clerk of police jury. (Recently mentioned. See "Machinery Wanted.")

Hondo, Texas.—Medina county will vote April 6 on issuance of \$40,000 bridge and road bonds. Address County Commissioners.

Houston, Texas.—W. C. Fordyce, Thomas Randolph, both of St. Louis, Mo., and others contemplate, it is reported, construction of railway and wagon bridge at Houston.

Kansas City, Mo.—Chicago & Alton Railroad, W. D. Taylor, chief engineer, Chicago, Ill.; Missouri Pacific Railway, M. L. Byers, chief engineer, St. Louis, Mo., and Metropolitan Street Railway have submitted plans to James L. Darnell, city engineer, for proposed viaduct on Lydla avenue, estimated to cost \$77,000; plans were prepared in 1901, when companies had reached tentative agreement.

Moholie, Ala.—Board of Road and Revenue Commissioners has voted to build bridge 1280 feet long across Fowl River; plans being prepared and bids will be invited.

Sperryville, Va.—Road Commissioners, Rappahannock county, will let contracts March 8 for construction of bridges at Sperryville and Jolliffe's Ford, both over Thornton's River. For plans, specifications, etc., address Geo. W. Kinsey, chairman Road Board, Washington, Va., and Hon. P. St. J. Wilson, Highway Commissioner, Richmond, Va.

### CANNING AND PACKING PLANTS

Cameron, Texas.—Company will be incorporated with \$10,000 capital stock by A. J. Dorsett, J. D. Heffey, B. D. Atkinson and others, to establish cannery.

Cameron, Texas.—A. J. Dossett is interested in cannery lately reported; to organize company with capital stock of \$10,000 and install equipment for daily capacity of 10,000 two-pound cans; 40-horse-power steam plant. (See "Machinery Wanted.")

Gueydan, La.—J. B. Foley will set out about 80 acres of figs and establish plant for canning.

Hightown, Ark.—Hightown Canning Co. incorporated with \$10,000 capital stock; W. E. McIntyre, president; W. W. Manning, vice-president; F. S. Hightown, secretary and treasurer.

Mt. Pleasant, Texas.—Break o' Day Canning Co., J. V. Moore, manager, will establish cannery; will erect structure 75x100x50 feet; ordinary construction; bids for machinery to cost about \$3000 will be opened about May 1; cost of building, \$1500. (See "Machinery Wanted.")

Pulaski, Tenn.—Hall & Kennard, Dickson, Tenn., are interested in organization of company with \$5000 capital stock to establish cannery; plan to take over Pulaski Creamery, erect additional building and equip cannery; capacity, 15,000 cans daily.

### CLAYWORKING PLANTS

Hollywood, Ala.—Alabama Brick & Tile Co., recently reported incorporated with \$5000 capital stock, succeeds E. J. Neher & Son; has installed stiff-mud-brick machinery and will manufacture drain tile and brick; capacity, about 10,000 brick daily; E. J. Neher, president; W. J. Matthews, vice-president; W. B. Neher, secretary, treasurer and manager.

Houston, Texas.—Bricks.—J. J. Sikes & Co. have organized company for manufacturing bricks.

Jackson, Tenn.—Queensware.—Jackson Queensware Co. incorporated with \$25,000 capital stock by J. E. Ryley, W. A. Holley, T. A. Pattem and others.

Mexia, Texas.—Tile and Drainage Pipe.—T. F. Hooke and associates reported to be developing tile and drainage pipe plant. (See "Miscellaneous Enterprises.")

North Mountain, W. Va.—Brick.—L. L. Dilling and F. H. Robins will establish brick plant with capacity of about 100,000 brick daily; cost about \$100,000.

Oklahoma.—Mt. Vernon Press Brick Co. (not Minnaugh Dry Press Brick Co.), Mt. Vernon, Ill., is correct title of company recently noted as contemplating establishment of brick plant in Durant; proposed daily capacity, 50,000 bricks; location not decided.

Raleigh, N. C.—Bricks.—Johnson & Johnson Company will install steam shovel; is

planning to increase season's output to 10,000,000 bricks.

### COAL MINES AND COKE OVENS

Alexander, W. Va.—J. B. Hart, Clarksburg, W. Va., contemplates constructing coal tipple and developing coal mines near Alexander.

Barton, Md.—William Ritchie and Joshua Ross, both of Piedmont, W. Va., have leased Moscow Mine No. 1 and will operate.

Birmingham, Ala.—Birmingham-Warrior Coal & Iron Co. incorporated with \$6,000 capital stock. George T. Bishop, president; Frank H. Ginn, vice-president and treasurer, both of Cleveland, Ohio, and D. E. Mitchell, Lebanon, Tenn., secretary.

Birmingham, Ala.—Frisco-Central Coal Co. incorporated with \$50,000 capital stock; has taken over Red Star Coal Co. and purchased interest of P. O. Goodwin, general manager West Pratt Coal Co., Dora, Ala., whereby it secures control of property capitalized at \$100,000. A. Maben Hobson, president; Walter Moore, vice-president; S. H. Tuck, secretary-treasurer.

Birmingham, Ala.—Imperial Coal & Coke Co., First National Bank Bldg., contemplates improvements to its mining properties; mortgage deed covering \$100,000 bond issue has been filed.

Jefferson City, Mo.—Grand River Coal & Coke Co. incorporated with \$700,000 capital stock by Harry B. Tyson, Joseph S. Barbo, W. W. Goodall and others.

Jeffery, W. Va.—Coal River Co. incorporated with \$50,000 capital stock by J. M. Moore and W. A. Garrett, Raleigh, W. Va.; R. A. McClure, T. T. Lewis and W. H. Stephenson, Kellsy, W. Va.

Morgantown, W. Va.—Regal Coal & Coke Co. organized by A. C. Fulmer to develop 278 acres on Monongahela River; later about 200 coke ovens will be constructed.

Philippi, W. Va.—Modern Coal Co. incorporated with \$10,000 capital stock by A. N. Witherbee, Charles G. Blake, both of Philadelphia, Pa.; George B. Thoson, Davis, W. Va., and others.

### CONCRETE AND CEMENT PLANTS

Oklahoma City, Okla.—Acers Gate Co. has taken over Hollow Concrete Pole Co. and will establish plant for manufacture of hollow concrete electric-light and telephone poles.

### COTTON COMPRESSES AND GINS

Montgomery, Ala.—C. L. Gay is promoting organization of company to establish \$30,000 cotton compress.

Richland, Ga.—Company organized with \$50,000 capital stock; T. F. Carter, president; James E. French, vice-president; G. W. McWhorter, secretary and treasurer; will establish compress; will erect platform and sheds; ordinary construction; cost \$5000.

Rule, Texas.—Swift Gin Co. incorporated with \$15,000 capital stock by W. A. Earnest, J. L. Jones and W. H. Swift.

### COTTONSEED-OIL MILLS

Athens, Ala.—Henry Warten, Leo Warten and others will establish cottonseed-oil mill, fertilizer factory and ice and cold-storage plants; cost about \$100,000.

### ELECTRIC-LIGHT AND POWER PLANTS

Augusta, Ga.—Georgia-Carolina Power Co. chartered with capital stock of \$500,000 and privilege of increasing to \$2,000,000 by N. B. Dial of Laurens, S. C.; J. L. Hankinson and W. G. Lancaster; will construct dam 25 feet high to develop 800 horsepower for transmission by electricity to Augusta and South Carolina cities; location of plant, mouth of Stevens' Creek, two miles above Augusta locks.

Berlin, Md.—City will receive bids until March 16 for construction of electric and water systems; Dodge & Day, Washington Bldg., Philadelphia, Pa., are engineers; Orlando Harrison, Mayor.

Bluefield, W. Va.—Bluestone Traction Co. has purchased machinery for additional equipment to power plant recently noted to be installed.

Booneville, Ark.—Booneville Light & Water Co., John P. Thayer, president, will install water-power electrical plant in con-

nexion with water-works system to be constructed. (See "Water-works.")

Charlotte, N. C.—City will open bids March 15 for lighting streets and other public places with electricity for five years from August 15; not less than 250 arc lamps; A. H. Washburn, chairman Light Committee, Board Public Service, City Hall. (See "Machinery Wanted.")

Chickasha, Okla.—Chickasha Gas & Electric-light Co. incorporated with \$175,000 capital stock by Lawrence Martin, Dennis O'Brien, A. A. Humphrey and C. E. Ross.

Colquitt, Ga.—City has appointed J. B. McCrary & Son, Atlanta, Ga., as engineers for electric-light plant to be constructed; L. E. Calhoun, Mayor. (Bond issue of \$15,000 lately noted for electric plant and water-works improvements.)

Crowell, Texas.—City Council granted franchise to L. G. Andrews and W. L. Campbell for electric lighting.

Dallas, Texas.—Holson Electric Co. increased capital stock from \$80,000 to \$116,000.

Douglasville, Ga.—City will vote either on issuance of bonds for construction of electric-light plant or on granting franchise to J. D. House of Douglasville; cost of system, from \$4000 to \$8000; J. R. Hutcheson, Mayor. (Recently mentioned.)

Elberton, Ga.—City has voted \$5000 bond issue for improvements to electric-light plant. Address The Mayor. (Recently mentioned.)

Fredericksburg, Va.—The Electric Generating Co. will lease water-power from Fredericksburg Power Co., and expects to build electric plant with capacity of 2000 horsepower; Wm. C. Whitmer, president of Fredericksburg Power Co., will probably act as consulting engineer in preparation of plans for power-house and hydraulic development; plans probably ready by April 1. (Both companies reported recently.)

Jefferson City, Mo.—Missouri Electric, Gas & Water Co. incorporated with \$50,000 capital stock by Harry B. Tyson, Joseph Barbo, W. W. Goodall and others.

Kinston, N. C.—City contemplates voting on issuance of \$75,000 of bonds for extension of light system, etc. Address The Mayor. (See "Water-works.")

Leesburg, Fla.—City is considering construction of electric-light plant. Address The Mayor.

Maryville, Mo.—Rockford Electric Light Co. will rebuild plant destroyed by fire. James L. Clark is manager.

Medford, Okla.—City will vote March 17 on granting of franchise to Medford Ice, Light & Power Co. for furnishing power to all city buildings. Address The Mayor.

Mt. Olive, Miss.—Huston & Cunningham, engineers, 725 Maison Blanche Bldg., New Orleans, La., are preparing plans and specifications for electric-light plant in Mt. Olive, recently reported; estimated cost, \$7500; bids to be opened in about six weeks.

National Soldiers' Home, Va.—R. R. Richardson & Son, Hampton, Va., have contract for erection of power-house, and John W. Danforth Co. of New York for electrical apparatus. (See Government and State Buildings.)

Opelika, Ala.—City invites correspondence relative to supplying water and light. W. C. Robinson, City Clerk.

Pennsboro, W. Va.—O. E. Pratt has applied to City Council for franchise to construct electric-light and power plant.

Richmond, Ky.—Eastern Kentucky State Normal School awarded contract to Combs Lumber Co., Lexington, Ky., for erection of power-house building, and to F. A. Clegg & Co., Louisville, Ky., for equipment. (See Schools.)

Roanoke, Va.—Craig Water-Power Co., A. L. Silbert, president, is having plans prepared by C. S. Wenger, consulting hydraulic engineer, Brownstown, Pa., for electric-power plant to develop water-power of Meadow and John's creeks; plant at former place will have capacity of 25,000 horsepower under 800-foot head; equipment will consist of two impulse water-wheel driven units, direct connected, of 700 kilowatts each; installation on John's Creek will be made later, and will develop same horsepower under 225-foot head; equipment will probably be duplicate of first; all details not decided, but Mr. Wenger will probably purchase machinery. (Last October company incorporated with \$200,000 capital stock.)

Selma, Ala.—John H. Bolinger, 415 Alabama St., contemplates building electric-light plant. (See "Machinery Wanted.")

Seneca, S. C.—Last week's report that A. B. Groscoe has purchased water-power on Change Creek was not correct. Traxler-Taylor Real Estate Co. of Greenville, S. C., owns the property.

Snyder, Texas.—City Council granted franchise to R. F. Brumbach, Ennis, Texas, for installation of electric-light plant.

Spring Hill, Tenn.—Cheek, Andrews & Jones, proprietors Spring Hill Mills, considering installation of electric-lighting plant.

Terrell, Texas.—City awarded contract to Houston & Cunningham, engineers, 725 Madison' Blanche Bldg., New Orleans, La., at \$14,733.53, for electric-light plant; contract for building awarded T. D. Greathouse, Terrell, at \$1,788.78; structure is to be frame; ordinary construction; 48x22 feet; W. C. Drake, engineer in charge; E. R. Miller, City Clerk.

Tonkawa, Okla.—City contemplates installation of \$18,000 electric-light plant; J. P. Jarolemon, Mayor.

Wharton, Texas.—City granted 50-year franchise to J. J. Wensley, manager Wharton Ice & Cold Storage Co., for erection of electric-light plant.

Whiteville, Tenn.—Edward Stewart and Rivers Norment will construct electric-light plant to cost about \$5000.

#### FLOUR, FEED AND MEAL MILLS

Crawfordsville, Ga.—Ogeechee River Mills, R. C. Ogletree, manager, will establish corn mill.

Dublin, Va.—Dublin Roller Mills will make improvements.

Florence, Mo.—New Florence Mill & Elevator Co. organized with \$38,000 capital stock.

Fort Smith, Ark.—Ballentine Milling Co. incorporated by E. S. Ballentine; will manufacture patent self-rising flour.

Maiden, Mo.—E. G. Goldsmith will erect mill to replace plant burned in December at loss of about \$3000.

Mt. Juliet, Tenn.—J. C. Carver will establish 25-barrel flour mill; contract for machinery awarded to Sprout, Waldron & Co., Muncey, Pa.

Sherman, Texas.—Sherman Mill & Grain Co., recently reported incorporated with \$75,000 capital stock, is reorganization of Brackett-Fielder Mill & Grain Co.; no additions to plant; J. R. McElroy, manager.

Sydnorville, Va.—W. L. T. Hopkins will establish new mill.

#### FOUNDRY AND MACHINE PLANTS

Alexandria, Va.—Engines.—Emerson Engine Co. has purchased plant of Pope-Reo Automobile Co., Hagerstown, Md.; will remove the machinery to Alexandria and establish plant for manufacturing engines for automobiles and motor-boats.

Baltimore, Md.—Gas Implements.—Universal Gas Implement Co. incorporated with \$100,000 capital stock by Von Hoffman Herr, Austin Herr, W. A. Newman, Doreland, all of Baltimore, and Frederick F. Windle, Philadelphia, Pa.

Beaumont, Texas.—Boilers, Tanks, etc.—W. H. Penman, recently noted as having purchased site and to establish plant, will erect structure 40x80 feet; corrugated galvanized iron; cost \$900; machinery (including punching and shearing machines, rolls, air compressor and hoists) to cost \$500 has been purchased; will manufacture boilers, tanks, sheet and plate work, etc.

Birmingham, Ala.—A. O. Kehm Casting Co. will erect foundry building and equip for manufacture of heavy castings. (Noted in December.)

Birmingham, Ala.—Bolt Works.—Charles J. and H. C. Graham, secretary and treasurer of Graham Nut Co., Pittsburgh, Pa., have acquired controlling interest in American Bolt Co., East Birmingham; price reported at \$125,000; will erect additional building and install machinery to increase capacity to considerable extent; new offices of American Bolt Co. are: President, Charles J. Graham; vice-president and treasurer, Harry C. Graham; assistant treasurer, Chas. W. Gray, each of Pittsburgh; vice-president, John J. Wirth of Birmingham.

Boykins, Va.—Machine Shop.—Boykin Repair Co. incorporated with \$15,000 capital stock; W. H. Capell, president; T. T. Atkins, vice-president; C. T. Beaton, secretary and treasurer. (See "Machinery Wanted.")

Brownsville, Texas.—Machine Shops.—Rio Grande Machine Shops incorporated with \$5000 capital stock by M. A. Newman, Jeff Lawson and T. J. Lawson.

Charleston, W. Va.—Electric Motors.—Reciprocating Electric Motor Co. incorporated with \$500,000 capital stock by Eli T. Conner, H. McLean Conner and others.

Charlotte, N. C.—Patent Pumps.—Domestic Water Supply Co. incorporated with \$6000 capital stock by L. B. Robertson, C. E. Hooper and A. M. Guillet; will manufacture patent automatic weight pressure pump.

Crowley, La.—Machinery.—Crowley Iron & Machinery Co., organized by C. E. Warren, Chicago, Ill.; John Burgin, Jay Freeland, both of Crowley, and others has purchased and will operate plant of Champion Iron Works.

Elkwood, Va.—A. Bowles is organizing stock company to establish machine shop for general repairs. (See "Machinery Wanted.")

Fort Smith, Ark.—Iron Works.—Mehlberger Iron Co. incorporated with \$18,000 capital stock by Conrad Mehlberger, J. E. Richardson, R. E. Frizzell and others.

Houston, Texas—Castings.—L. A. Pitts, Dubuque, Iowa, will establish plant in South Houston for manufacturing railroad and machine castings; will erect foundry building 80x125 feet; cement foundation and molding pits.

Kansas City, Mo.—Lubricators and Machinery Supplies.—Engineers' Specialty Co. will erect factory for lubricators and machinery supplies; cost \$15,000.

Littleton, N. C.—Machinery.—Tate Machinery & Supply Co. incorporated with \$20,000 capital stock by J. L. Tate, N. H. Tate and W. G. Hall.

Richmond, Va.—Cotton Compresses.—Neely Compress & Cotton Co. incorporated recently with capital stock of \$1,000,000, is planning to manufacture and introduce compress for rectangular bales of cotton; 24x30x40-inch bales, weighing 500 pounds; compress invented by Samuel N. Neely. Address company, care of American Finance Corporation, Merchants' National Bank Bldg.

Roanoke, Va.—Iron Works.—Virginia Bridge and Iron Works, recently noted to make additions, is improving yard and crane facilities.

Sheffield, Ala.—Stove Foundry.—Company organized with A. D. Thomas president, E. A. Robertson secretary and treasurer, S. A. Lowman manager; to operate plant of Lizzie Lowman Stove Co.; will probably double capacity.

Spartanburg, S. C.—Steel Bridges.—A. D. McClain will, it is reported, establish plant for manufacturing steel bridges.

Spartanburg, S. C.—Machines.—Russell Machine Co. incorporated with \$100,000 capital stock by W. H. and S. J. Russell, Spartanburg, and C. S. Russell, Fayetteville, N. C.

St. Louis, Mo.—Bake Ovens.—Ahlheim Bake Oven Manufacturing Co. incorporated with \$50,000 capital stock by Peter A. Ahlheim, Richard A. Horst and Frederick A. Koch.

St. Louis, Mo.—Machinery and Patterns.—Coyle Manufacturing Co. incorporated with \$10,000 capital stock by Thomas M. Coyle, John C. Rader and W. Scott Hancock.

**GAS AND OIL DEVELOPMENTS**

Abbeville, La.—DeLambre Oil & Mineral Co. incorporated with \$25,000 capital stock by Felix J. Richard, Homere Landry, A. T. Delambre and others.

Beaumont, Texas.—Martha Oil Co. incorporated with \$10,000 capital stock by Bert Goodeham, J. E. Pew and Wirt Davis.

Chickasha, Okla.—Chickasha Gas & Electric Light Co. incorporated with \$175,000 capital stock by Lawrence Martin, Dennis O'Brien, A. A. Humphrey and C. E. Ross.

Fort Worth, Texas.—Yount Oil Co. incorporated with \$6000 capital stock by P. P. Cannon, M. F. Yount and L. Wilkinson.

#### ICE AND COLD-STORAGE PLANTS

Athens, Ala.—Henry Warten and associates will establish ice and cold-storage plant. (See "Cottonseed-oil Mills.")

Birmingham, Ala.—Swift & Co. awarded contract to A. J. Krebs Company for repairs to and remodeling of four-story building recently mentioned; meat market and refrigerator; electric lighting; freight elevator; cost \$19,500.

Biscoe, N. C.—Ice & Cold Storage Co., W. Clyde Capel, agent, recently reported incorporated (under "Foundry and Machine Plants") with \$20,000 capital stock, will install refrigerating and ice-manufacturing machinery; will also deal in refrigerators, ice tools, etc. (See "Machinery Wanted.")

Brady, Texas.—S. G. Kimbro, 921 Louisiana Ave., Fort Worth, Texas, and others will incorporate stock company to establish fifty-ton ice plant.

Byromville, Ga.—Byromville Manufacturing Co. contemplates building an ice plant.

Camden, Ark.—John Thornton will, it is reported, establish cold-storage plant; to erect structure 60x100 feet; capacity, 20 cars of produce.

Clarksville, Ark.—Clarksville Ice & Gin Co. incorporated with \$15,000 capital stock by Wiley Harris, J. J. Montgomery, E. L. Hailgood and others.

Clifton Forge, Va.—B. F. Donovan contemplates building ice plant. (See "Machinery Wanted.")

Columbus, Tenn.—John A. Ashton will establish seven-ton ice plant in connection with his mill; water and steam power.

Crowell, Texas.—Dougherty Bros., Alpine, Texas, will establish ice plant in Crowell.

Cynthiana, Ky.—Ben Stone, Georgetown, Ky., and Mr. Winn, Richmond, Ky., contemplate establishing ice plant in Cynthiana.

Farmersville, Texas.—Farmersville Ice Co. will build ice plant with daily output of 20 tons; cost of building, \$2000; cost of machinery, \$20,000; all contracts awarded; J. N. Raynor, president; W. F. Pendleton, vice-president; R. W. Rike, secretary.

Houston, Texas.—Merchants' Ice & Cold Storage Co. incorporated with \$300,000 capital stock by Joseph F. Meyer, B. A. Riesmer, James A. Baker and others; will establish cold-storage plant; will erect brick and reinforced concrete structure; six stories. During construction of new building company will occupy rented quarters and operate with capacity of 300 carloads of vegetables, fruit, etc.

Lexington, S. C.—S. J. Leaphart contemplates erecting ice plant. (See "Machinery Wanted.")

Loneoke, Ark.—Bransford & Daniel contemplate establishment of ice plant.

Milan, Tenn.—Milan Ice & Coal Co., W. H. Coley, president, recently noted to establish 10-ton ice plant, has placed orders for machinery with Frick Company, Waynesboro, Pa.; cost \$10,000; will erect \$2500 building of ordinary construction, 48x82 feet.

Lexington, S. C.—Orange Fruit & Commission Co. organized with F. H. Farwell president, to establish cold-storage plant. (See "Miscellaneous Enterprises.")

Ridgeville, S. C.—Industrial Stock Farming Co. contemplates installation of small cold-storage plant. (See "Machinery Wanted.")

Sanford, N. C.—Lee Ice & Fuel Co. incorporated with \$25,000 capital stock; will establish five-ton ice plant; will erect building costing from \$500 to \$1000; contract placed for machinery costing \$4500; C. H. Smith, president; G. H. Wilkie, secretary-treasurer. (See "Machinery Wanted.")

Winston-Salem, N. C.—Carolina Cold Storage Co. will make extensive improvements to plant, including erection of special cold-storage room, with temperature below zero, exclusively for ice-cream; installation of 150-horse-power boiler, contract for which has been awarded to Crawford Plumbing & Mill Supply Co., Winston-Salem, and installation of 15-ton ice-making machine.

#### LUMBER-MANUFACTURING PLANTS

Alexander, W. Va.—Croft Lumber Co. has purchased tract of timber land and will establish large hand mill to cut the timber.

Arkansas—Leavitt Lumber Co., Chicago, Ill., owning about 42,000 acres of hardwood timber land in Lincoln and Drew counties, Arkansas, is planning establishment of mill.

Bryceland, La.—Hiram J. Allen Lumber Co. will erect additional sawmill; plans not yet completed; no machinery needed; daily capacity of plant 125,000 feet yellow-pine lumber.

Byromville, Ga.—Byromville Manufacturing Co. contemplates building planing mill.

Charleston, S. C.—Minnesota-South Carolina Land & Timber Co. organized with \$500,000 capital stock; W. H. Cook, president and treasurer; Dan Haley, vice-president; J. F. Walsh, secretary, all of Duluth, Minn.

Clarksburg, W. Va.—Richards Construction Co. will rebuild plant recently burned at loss of about \$10,000.

Columbia, N. C.—D. D. Armstrong, 1110 Candler Bldg., Atlanta, Ga., will establish sawmill at Columbia, N. C.; bids for machinery to be opened March 15; capacity 10,000 to 15,000 feet daily; D. F. Armstrong, Columbia, architect and engineer in charge. (See "Machinery Wanted.")

Deerfield, Va.—Deerfield Lumber Co. incorporated with G. H. Crippen president, Earl L. Brown secretary, both of Corry, Pa.; J. H. West, Warren, Pa., vice-president; company is planning development of timber lands near Deerfield. (Recently noted under Augusta county, Va.)

Elk Creek, P. O., Knoxville, Tenn.—Lee McChesney will, it is reported, establish band mill.

Elkins, W. Va.—Monroe Lumber Co. incorporated with \$25,000 capital stock; J. S. Dennis, president; A. C. Pfifer, vice-president; H. D. Dennis, manager; W. H. Mason, secretary and treasurer; has purchased about 4000 acres of timber land and will establish mill to cut the timber; one mill in course of construction.

Franklin, La.—Washington Lumber Co. organized by E. E. Droege, George S. Lacy and W. E. Welch; purchased plant of Franklin Lumber Co.; will make improvements and increase capacity.

Fullerton, La.—Gulf Lumber Co., recently noted to erect second mill, will erect structure 64x212 feet; steel and concrete; capacity, 250,000 feet daily; cost about \$125,000; M. L. Fleishel, vice-president and general manager; also has offices at St. Louis, Mo.

Hattiesburg, Miss.—A. Hudson will make improvements to sawmill plant near Hattiesburg.

Hawthorne, La.—Logan & Moore Lumber Co., Kansas City, Mo., reported as starting construction of proposed plant at Hawthorne, will erect single band mill with planer and steam kilns; also construct standard-gauge tramroad; reported to have purchased 2,000,000 feet of timber on land eight miles from Hawthorne; G. E. Logan, Inn Hotel, Shreveport, La., is in charge of construction.

Hollywood, Miss.—W. R. Perkins, Memphis, Tenn., has purchased hardwood mill at Hollywood of Levitt Lumber Co., Chicago, Ill.

Jackson, Tenn.—Standard Veneer & Lumber Co. incorporated with \$10,000 capital stock by H. Warner, E. S. Warfield, W. H. Rodgers and others.

Lexington, Texas.—Lee County Lumber Co. incorporated with \$15,000 capital stock by A. F. Konzelman, L. E. Hahn and J. D. Smith.

Mobile, Ala.—Field-Barnett Tie & Lumber Co. incorporated with \$4000 capital stock; C. P. Field, president; W. G. Outerbridge, secretary and treasurer; A. F. Hurtel, general manager.

Mocksville, N. C.—Kincaid Bros., Statesville, N. C., recently noted to establish planing mill in Mocksville, will erect plant; 40x80 feet; wood; ordinary construction; cost of building \$1000; will install planer, edger and trimmer; capacity 15,000 feet daily.

New Orleans, La.—Fisher Bros. Lumber Co. will erect sawmill to replace plant previously dismantled.

Norman, Texas.—McKinnon Lumber Co., Shreveport, La., has purchased circular saw mill plant with capacity of 30,000 feet daily and about 50,000,000 feet of timber near Norman; will install additional boilers and operate; later will dismantle plant and replace with modern band mill.

Pinnacle, Ark.—Hollis & Petersen, Belfast, Ark., will establish sawmill at Pinnacle.

San Augustine, Texas.—Foley Planing Mills has changed name to J. M. Price Lumber Co. and increased capital stock from \$10,000 to \$15,000.

Shreveport, La.—Bradford-Hicks Lumber Co. incorporated with \$12,000 capital stock; W. R. Bradford, president; S. B. Hicks, vice-president, and W. A. Field, secretary and treasurer.

Strangecreek, W. Va.—Mead & Speer Lumber Co. will rebuild plant recently reported burned; lost about \$100,000.

St. Landry, La.—Chmax Lumber Co. organized with \$50,000 capital stock; W. D. Haas, president; Joe Friedlander, vice-president; R. J. Marshall, secretary and treasurer.

Sylva, N. C.—Buchanan & Dunn Lumber Co. incorporated with \$100,000 capital stock; W. H. Dunn, president, Abingdon, Va.; M. Buchanan, Balsam, N. C., treasurer; Coleman C. Cowan, vice-president.

Thomasville, Ga.—Pretoria Lumber Co. organized by F. J. Ansly, Fraser Driver and J. L. Turner; has purchased and will operate plant of Macon Lumber Co. at Pretoria; property includes 30,000,000 feet uncut lumber, 30 miles of railroad, drykiln, sawmill, etc.

Wrigley (not a postoffice), Ky.—S. B. Reese, Farmers, Ky., and John W. Kitchen, Ashland, Ky., will establish large band mill on Morehead & North Fork Railroad, near Wrigley.

#### MINING

Anniston, Ala.—Manganese, Tripoli and Kaolin.—R. B. Potts contemplates development of mineral lands containing manganese, tripoli, kaolin, etc.

Baltimore, Md.—Marble, Granite, etc.—W.

M. Longley Quarry Co. Incorporated with \$10,000 capital stock by W. M. Longley, 711 Bloomingdale Rd.; Wm. P. Bolton, 715 North Calhoun St., and Joshua T. Gallagher, 2864 Rayner Ave.

Cartersville, Ga.—Iron Ore.—James Layton contemplates development of iron-ore deposits.

Durgon, W. Va.—Copper.—A. W. Harper is planning development of copper deposits near Durgon.

Fort Smith, Ark.—Carrie Mining Co. Incorporated with \$50,000 capital stock by J. H. Wilson, president; J. H. Delano, F. O. Butt and O. E. Sawyers.

Gaffney, S. C.—Flint Hill Mining Co. Incorporated with \$250,000 capital stock by L. M. Campbell, H. W. Gayley, both of Gaffney, and A. S. Booker, Bluefield, W. Va.

Little Rock, Ark.—Diamonds—Ozark Diamond Mines Corporation organized with \$1,500,000 capital stock; R. D. Duncan, president; Charles McKee and H. E. Bemis of Prescott, Ark., vice-presidents; B. D. Russell, secretary; company purchased Ozark Diamond Mining Co., absorbing entire interests, and will begin developments at once.

Richmond, Va.—Granite.—Virginia Granite Co., recently reported incorporated, has purchased 43 acres of land near Richmond and will develop for granite deposits; property has been equipped, but new company will install additional machinery, including steam traveling crane; all contracted for; William J. Merrill, financial agent, American National Bank Bldg., Richmond.

Webster, N. C.—Nickel.—W. S. Adams will install 20-ton smelter on his nickel property.

Winesap, Va.—Kaolin.—Richard Turner contemplates development of kaolin deposits near Winesap.

#### MISCELLANEOUS CONSTRUCTION WORK

Charleston, S. C.—Wharf.—Charleston Ore Co. awarded contract to Samuel J. Pregnan of Charleston for construction of wharf, in connection with a smelting plant now being built on Ashley River for obtaining iron out of pyrites cinders.

Hickory, N. C.—Underpass.—Southern Railroad will build underpass on 14th street; 90 feet long; 35 feet wide; 12 feet high; cost about \$30,000. Further information can be obtained from T. H. Gatling, M. E., Knoxville, Tenn.

Hickory, N. C.—City is having surveys made preparatory to construction of concrete subway for Fourteenth street; subway to be 40 feet wide and afford double driveway under railroad crossings, with sidewalks on each side; cost about \$50,000. Address The Mayor.

New Orleans, La.—Levee.—Atchafalaya Basin Levee Board, M. M. Lefebvre, president, awarded contract to R. T. Clark, Natchez, Miss., at 37.89 cents per cubic yard for enlargement of Holloway Levee, in Atchafalaya River, in Pointe Coupee Parish, amounting to about 42,000 cubic yards to Hearn & Ryan, Baton Rouge, La., at 17.99 cents per cubic yard, for enlarging Patenachee Levee, on same stream, in same parish; latter to contain 40,000 cubic yards. (Recently mentioned.)

Port Allen, La.—Levee.—Bids will be opened February 25 for enlargement of Hickey Levee, West Baton Rouge Parish, Mississippi River, right bank; approximate quantities, 50,000 cubic yards; V. M. Lefebvre, president Board of Commissioners, Atchafalaya Basin Levee District. (See "Machinery Wanted.")

Port Lavaca, Texas—Wharf.—W. C. Johnson of Calhoun Cattle Co. will erect 700-foot wharf.

#### MISCELLANEOUS ENTERPRISES

Alexandria, Tenn.—Grain Elevator.—Star Milling Co. will establish grain elevator.

Alice, Texas—Orange Orchard.—Texas Orange Colony Incorporated with capital stock of \$20,000 by A. L. Matlock, J. W. Muncy and Clark S. Packard of San Antonio, Texas; reported to plant 600,000 orange trees on 6000 acres of land and to make other improvements at cost of over \$100,000.

Atlanta, Ga.—Garage.—Edwin P. Ansley, 71 North Forsythe St., is having plans prepared by A. Ten Eyck Brown, Atlanta, for 10-story reinforced concrete fireproof building for storing, repairing and displaying automobiles.

Atlanta, Ga.—Publishing.—Times Publishing Co. incorporated with \$25,000 capital stock; will publish afternoon newspaper—The Star; temporary offices, Brown Randolph Bldg.

Augusta, Ga.—Contracting.—Palmer Contracting Co. incorporated with \$5000 capital stock by L. E. Palmer, E. F. Magruder and Julian Zachry.

Baltimore, Md.—Publishing.—Bohemian-American Publishing Co. incorporated with \$5000 capital stock by Venceslaus J. Shimek, 932 North Broadway; Frank J. Pliner, 918 North Broadway; Jos. Kapralek, 930 North Broadway, and others.

Baltimore, Md.—Contracting.—Maryland Construction & Development Co. incorporated with \$50,000 capital stock by Daniel F. Reisenweber, 537 North Chester St.; Jacob A. Frederick, Clarence W. Gould and others.

Baltimore, Md.—Suburban Development.—New York Central Realty Co., Wm. H. Cooper of Siegel-Cooper Company, New York, president, has taken over Edgcomb Park property, containing over 125 acres, and will proceed with development; will erect dwellings and an apartment-house.

Baltimore, Md.—Contracting.—George Long Contracting Co. incorporated with \$5000 capital stock by George Long, 206 First Ave. east; Conrad Long, 6 First Ave. east, and Mary Long.

Baltimore, Md.—Garage.—George Eisenhauer of Eisenhauer-McLea Company, 509 South Central Ave., has had plans prepared by C. M. Anderson, 324 North Charles St., Baltimore, for garage at North avenue and Lovegrove alley; old English inn style; steel, concrete and brick construction; fireproof; three stories; 39x175 feet; facades, half timber framing, with latticed dormer windows; to be occupied by Auto Outing Co.

Baltimore, Md.—Garage.—Dixon C. Walker, care of Automobile Club of Maryland, Garage, Charles street and Mt. Royal avenue, will erect garage at 1917 and 1919 North Charles street; three stories and basement; ornamental terra-cotta and brick with stone trimmings; concrete foundation.

Birmingham, Ala.—Coffee.—Southern Coffee Co. Incorporated with \$50,000 capital stock by W. R. White, V. T. Pritchard, D. E. Lanes and others.

Brownwood, Texas—Transfer.—Armstrong Transfer Co. Incorporated with \$5000 capital stock by L. A. Armstrong, Mrs. W. R. Armstrong and W. D. Armstrong.

Charlotte, N. C.—Publishing.—Record Publishing Co. Incorporated with \$10,000 capital stock by E. M. Darlington, R. B. Wilson and W. W. Watt, Jr.

Clifton Forge, Va.—Bottling Plant.—B. F. Donovan may establish bottling plant. (See "Machinery Wanted.")

Cross Keys, Va.—Mercantile.—Thomas P. Yager incorporated with \$25,000 capital stock; Thomas P. Yager, president, Cross Keys; B. F. Suter, secretary, Penn Laird, Va.

Dallas, Texas—Land Improvement.—Continental Realty Co. Incorporated with \$10,000 capital stock by J. C. Carmack, J. S. Snowden and N. H. Willbourn.

Dallas, Texas—Electrical Supplies.—Hobson Electric Co. as increased capital stock from \$80,000 to \$196,000; C. W. Hobson, president.

Durham, N. C.—Mercantile.—Robbins Dry Goods Co. Incorporated with \$50,000 capital stock by Charles Robbins, A. P. Wynn and D. L. Robbins.

El Paso, Texas—Garbage and Sewer Disposal Plant.—City had plans prepared by Herring & Fuller, New York, for proposed garbage and sewer disposal plant; cost \$125,000; Percy McGhee, City Clerk.

Ensley, Ala.—Land Improvement.—Realty Investment Co. Incorporated with \$50,000 capital stock; W. R. Stewart, president; A. J. Odom, vice-president; George R. Byrum, secretary; D. P. Knapp, treasurer.

Fort Worth, Texas—Contracting.—Bryce Building Co. incorporated with \$10,000 capital stock by William Bryce, B. S. Matson and John Maurice.

Florence, Mo.—Grain Elevator.—New Florence Mill & Elevator Co. organized with \$38,000 capital stock.

Fort Worth, Texas—Land Improvement.—Hub Land Co. incorporated with \$55,000 capital stock by N. H. Lassiter, William Bryce, Tom B. Owens and others.

Gaston, N. C.—Love Company Incorporated with \$100,000 capital stock by John P. Love, Robert A. Love and John L. Bryan.

Girard, Ga.—Transfer.—Girard & Waynesboro Transfer Co. Incorporated by Charles Brigham, W. R. Bost, W. V. Stephens and J. B. Heath.

Gulfport College, N. C.—New Garden Mercantile Co. Incorporated with \$20,000 capital stock by John W. Woody, M. F. Fox and C. T. Robertson.

Gulfport, Miss.—Grain.—George N. Foote Company incorporated with \$30,000 capital stock by George N. Foote, C. H. Campbell, Gulfport, and August Cooley, Mt. Olive, Miss.

Greensboro, N. C.—Contracting.—Interstate Construction Co. Incorporated by F. B. Ricks, F. C. Boyles, Ernest Clapp and others.

Harrisonburg, Va.—Contracting.—General Construction Co. Incorporated with \$10,000 capital stock; J. S. Fravel, president; J. P. Burke, vice-president; J. S. Heatwole, secretary.

Hartwell, Ga.—Cotton, Coal, Fertilizer, etc. Farmers' Cotton & Fertilizer Co. Incorporated by Clarence Linder, J. Lloyd Teasley and James E. Carter.

Houston, Texas—Printing.—Railroad Echo Printing Co. Incorporated with \$10,000 capital stock by E. F. Trichell, W. A. Galbreath and Lewis Loggins.

Houston, Texas—Land Improvement.—Port Houston Land & Townsite Co. Incorporated with \$20,000 capital stock by J. W. Sanders, W. C. Munn, J. S. Rice and others.

Jacksonville, Fla.—Crematory.—Two separate bids will be opened March 2, one for complete garbage and refuse plant of 40 tons and one for plant of 50 tons; certified check for \$500; Philip Prieleau, City Engineer. (See "Machinery Wanted.")

Jellico, Tenn.—Supplies.—Jellico Supply Co. Incorporated with \$15,000 capital stock by J. J. Fagan, Frank Hawkins, R. O. Campbell and others.

Jonesboro, Ark.—Steam Laundry.—Edward Harris, Springfield, Mo., will establish steam laundry at Jonesboro.

Kansas City, Mo.—Printing Plant.—F. P. Burnap Printing & Stationery Co. will erect plant to replace present structure; six stories; reinforced concrete and terra-cotta; foundation to carry 10 stories; light on all sides; cost about \$60,000; plans by John W. McKenney, Kansas City.

Kansas City, Mo.—Publishing.—Daily Drovers' Telegram, George N. Neff, manager, will erect new plant; three stories; 36x120 feet; reinforced concrete; front faced with salmon-colored brick; machinery operated by electricity and placed above high-water line.

Knox City, Tex.—F. E. Adams & Co. Incorporated with \$15,000 capital stock by F. E. Adams, E. C. Crouch, C. W. Ground and D. B. Campbell.

Louisville, Ky.—Constructing.—L. R. Figg Company Incorporated with \$25,000 capital stock by L. R. Figg, W. H. Bowser and Allen L. Figg.

Louisville, Ky.—Steam Laundry.—Standard Laundry Co. Incorporated with \$10,000 capital stock; Eugene Perkins, president; Geo. H. Carter, vice-president and manager; J. E. McCampbell, secretary and treasurer.

Mansfield, Ark.—Mercantile.—Graves Dry Goods Co. Incorporated with \$25,000 capital stock; J. F. Graves, president; C. A. Vest, vice-president; C. A. Cogle, secretary and treasurer.

Marfa, Texas.—Murphy-Walker Company Incorporated with \$75,000 capital stock by W. H. Cleveland, T. C. Mitchell and others.

Memphis, Tenn.—Grain Elevator.—Guy E. Patterson awarded contract to Kaucher, Hodges & Co., Memphis, for erection of grain elevator; capacity, 20 cars in and out, and storage capacity at same time of nearly 50,000 bushels of grain; cost \$10,000.

Mexia, Texas.—Rock Crusher.—T. F. Hooke and associates have, it is reported, purchased rock-crushing plant and 357 acres of land, and will begin operations at once; also to establish plant for manufacturing tile and drainage pipe.

Mobile, Ala.—Transportation.—Grove Transportation Co. Incorporated with J. B. Webster, president; H. W. Fowler, secretary and treasurer; W. H. Johnson, manager.

Mt. Jackson, Va.—Garage.—Standard Garage Co. Incorporated with \$5000 capital stock; E. M. Hickman, president; J. L. Wissler, Jr., secretary and treasurer.

Mt. Vernon, Ky.—Grain Elevator.—Beatty & Hamlin will establish elevator with capacity of 5000 bushels of wheat.

Nashville, Tenn.—Publishing.—Southern Building Record Co. Incorporated with \$10,000 capital stock by Haynes McFadden, R. T. Creighton, E. T. Lewis; to publish Southern Building Record, recently purchased by Mr. McFadden.

New Orleans, La.—Dairy.—Arcadia Dairy Farm Incorporated with \$13,000 capital stock; James R. LeGallez, president; Anthony Bonaud, vice-president; George B. Smart, secretary and treasurer.

Norfolk, Va.—Land Improvement.—Jackson Place Corporation Incorporated with \$15,000 capital stock; G. F. Wilkinson, president; A. Mihado, vice-president; W. B. Farant, secretary and treasurer.

Norfolk, Va.—Mercantile.—Pinner's Point Company Incorporated with \$5000 capital stock; C. F. Harper, president; R. B. Carrington, vice-president; L. Harper, secretary and treasurer, all of Pinner's Point, Va.

Norfolk, Va.—Mercantile.—Mann Bros. Incorporated with \$100,000 capital stock; A. A. Mann, president; H. S. Mann, vice-president, both of Henderson, Ky.; W. H. Crouse, secretary, Norfolk.

Orange, Texas—Fruit and Commission.—Orange Fruit & Commission Co. organized with F. H. Farwell, president; F. W. Hustmyre, vice-president; J. R. O'Hara, general manager; George W. Winter, secretary and treasurer; leased Hewson Building, now under construction, half of which will be converted into cold-storage plant, other half for offices, etc.

Paris, Texas—Abattoir.—City will vote March 23 on \$10,000 bond issue for construction of abattoir at offal reduction plant; O. B. McKnight, City Secretary.

Pine Bluff, Ark.—Planting.—Langford Planting Co. Incorporated with \$50,000 capital stock; W. H. Langford, president and treasurer; J. S. Langford, vice-president; W. S. Harris, secretary.

Portsmouth, Va.—Mercantile.—W. N. White Incorporated with \$25,000 capital stock; W. N. White, president; A. E. Warner, vice-president; J. C. Emmerson, secretary and treasurer.

Raleigh, N. C.—Garage.—Carolina Garage & Machine Co. organized; will erect plant to cost about \$50,000.

Richmond, Va.—Land Improvement.—Hampton Park Co. Incorporated with \$50,000 capital stock; Edgar Gunn, president; R. H. Harwood, vice-president and treasurer; Wm. Todd, secretary.

Richmond, Va.—Printing Plant.—The Journal Company, A. R. Holderby, manager, will rebuild evening newspaper plant, burned at a loss of \$50,000; details not determined.

Richmond, Va.—Advertising.—Letter Writing & Folding Co. Incorporated with \$5000 capital stock; H. T. Ezekiel, president; H. S. Bloomberg, secretary; R. J. Campbell, treasurer.

San Antonio, Texas—Transfer.—King-Adams Transfer Co. Incorporated with \$10,000 capital stock by W. H. Adams, J. H. King and C. M. Fish.

San Antonio, Texas—Taxis and Automobiles.—San Antonio Taxicab & Auto Co. Incorporated with \$10,000 capital stock by Otto Limburger, James Vanlandingham and T. E. George.

San Augustine, Texas—Publishing.—San Augustine Publishing Co. Incorporated by D. S. Harrison, R. N. Stripling and William McDonald.

Smithfield, Va.—Mercantile.—Coleman Bros. & Rouse Incorporated with \$10,000 capital stock; A. A. Coleman, president; George P. Rouse, vice-president; B. P. Coleman, secretary and treasurer.

Somerville, Tenn.—Hardware.—Leach Hardware Co. Incorporated with \$10,000 capital stock by W. H. Leach, Jr., John N. Maxwell, E. A. Maddox and others.

Spencer, N. C.—Spencer Publishing Co. Incorporated with \$5000 capital stock by J. D. Dorsett, G. W. Connell and J. R. Thomas.

Stanton, Texas—Hardware.—Stanton Hardware Co. Incorporated with \$4000 capital stock by Charles E. Ebbs, T. M. Emerson and B. S. Cox.

St. Louis, Mo.—Automobiles.—King Electric Auto & Battery Co. Incorporated with \$5000 capital stock by Charles A. Nonig, Frank E. Stevens and Arthur King.

St. Louis, Mo.—Lithographing and Printing.—Monarch Lithographing & Printing Co. Incorporated with \$21,000 capital stock by Leonard L. Tolle, Gustav H. Vogt and others.

Tampa, Fla.—Dairy.—Tampa Dairy Co. awarded contract to Friend & Gattman, Tampa, for erection of dairy building; brick; cost \$3500.

Tampa, Fla.—Mercantile.—Richard Company Incorporated with \$25,000 capital stock; B. Richard, president; G. Richard, general manager and treasurer; J. Richard, secretary.

Trenton, Tenn.—Mercantile.—Riverside Mercantile Co. Incorporated with \$10,000 capital stock by C. F. Inman, L. H. Montgomery, C. P. Litton and others.

Valdosta, Ga.—Land Improvement.—Grady County Investment Co. Incorporated with \$10,000 capital stock by W. P. Smith, J. J. Coppage, Georgia Land & Timber Co. and C. D. Stevens.

Wallace, N. C.—Land Improvement.—Z. J. Carter & Son Incorporated with \$100,000 capital stock by Z. J. Carter, N. H. Carter, A. H. Carter and others.

Waynesboro, Ga.—Mercantile.—Bledsoe Furniture Co. Incorporated with \$10,000 capital stock by E. Bledsoe, E. C. Bledsoe and G. L. McElmurray.

Waycross, Ga.—Land Development.—John T. Myers and J. L. Crawley have purchased 3000 acres of land between Waycross and Blackshear, which they propose to develop; plan to divide into 10-acre farms, with experimental farm for settlers' use, and to establish a village.

Wilson, N. C.—Groceries.—Wilson Grocery Co. incorporated with \$125,000 capital stock by J. D. Farrier, George L. Morgan and D. J. Murray.

#### MISCELLANEOUS MANUFACTURING PLANTS

Anderson, S. C.—Fertilizer.—Anderson Phosphate & Oil Co. will rebuild acid chambers; walls to be of sheet lead; cost of improvements about \$15,000; J. R. Vandiver, president.

Athens, Ala.—Fertilizer.—Henry Warten and associates will establish fertilizer factory. (See "Cottonseed-oil Mills.")

Baltimore, Md.—Cardboard.—J. S. Young Company, Boston and Elliott Sta., recently noted as planning construction of additional mill for manufacture of cardboard from waste licorice root, has had plans prepared for structure for grinding and engine rooms, extractor-house and boiler-house, by C. M. Anderson, 324 N. Charles St., Baltimore; 200 feet long; brick and steel; contractors estimating include D. M. Andrews Co., Vickers Bldg.; John Hiltz & Sons Co., 3 Clay St.; Morrow Bros., 218 W. Saratoga St.; J. Henry Miller, 110 Dover St.; Baltimore; Concrete Co., 16 St. Paul St.; Gladfelter & Chambers, 2072 Woodberry Ave.; Arthur F. West, 217 S. Gilmor St., and Monmonier & Sorrell, 308 Laurens St., all of Baltimore.

Baltimore, Md.—Medicine.—Standard Medical Society, Linden Ave. and Hoffman St., has leased building at 246 W. Hoffman street and will equip for manufacturing medicine.

Baltimore, Md.—Drugs, Chemicals, etc.—Saliethol Chemical Co. incorporated with \$50,000 capital stock by Ralph M. Connable, 106 East 25th St.; Read A. McCaffrey, Law Bldg., and Jacob F. Murbach, Law Bldg.

Baltimore, Md.—Greases, Oil, etc.—Hayes American Anti-Friction Axle Grease Co. incorporated with \$25,000 capital stock by J. Frank Griffin, 220 St. Paul St.; Chas. J. Rose, 2422 East Lanvale St., and Cornelius E. B. Hayes, 722 West Saratoga St.

Berlin, Md.—Soap and Oil.—Berlin Soap & Oil Co. organized with \$5000 capital stock.

Big Stone Gap, Va.—Drugs.—Enterprise Drug Co. incorporated with \$10,000 capital stock; Gus W. Lovell, president; G. B. Myers, secretary and treasurer.

Cumberland, Md.—Glass.—Eastern Glass Co. incorporated with \$25,000 capital stock by William M. Mertens, John H. Mertens and others.

Bristol, Va.—Tenn.—Paxton Manufacturing Co. incorporated with \$15,000 capital stock; F. K. Paxton, president; T. W. Lewis, vice-president; C. E. Paxton, treasurer.

Bryson City, N. C.—Building Material.—Franklin Manufacturing & Development Co. incorporated with \$10,000 capital stock by A. J. Franklin, T. V. Shope and others.

Chattanooga, Tenn.—Paint.—Spencer S. Marsh, care of Northern Hotel, Chattanooga, Tenn., contemplates development of iron-ore property for paint manufacturing. (See "Machinery Wanted.")

Dallas, Texas—Crackers, Biscuits, etc.—Dallas Cracker & Biscuit Co. incorporated with \$200,000 capital stock by I. J. Willingham, J. G. Pyle, H. J. Willingham and others.

Dallas, Texas.—J. Delgado Manufacturing Co. incorporated with \$8000 capital stock by J. R. Tenison, E. J. Mutt and J. B. Andrews.

Dallas, Texas—Radium Spray.—Radium Spray Co. incorporated with \$10,000 capital stock by S. W. Wesley, F. C. Holman and E. H. Bell.

Dallas, Texas.—Hardwick-Abbott Manufacturing Co. incorporated with \$30,000 capital stock by S. W. Hardwick, H. B. Abbott and John M. Spellman.

Easton, Md.—Shirts.—Easton Shirt Manufacturing Co., recently reported incorporated and to have purchased plant of Norfolk Manufacturing Co., will install from 40 to 100 sewing machines; capacity, 150 to 200 shirts daily. (See "Machinery Wanted.")

Eatonont, Ga.—Fertilizer.—Putnam Fertilizer Co. will be name of company recently noted to establish factory; will erect \$2000 wood and brick building; ordinary warehouse construction; machinery purchased; capacity 50 to 100 tons daily; officers not elected; T. C. Shorey, manager.

El Reno, Okla.—Cereals.—Carmody &

Humphrey will establish cereal food mill, to cost about \$25,000.

Fort Worth, Texas—Glass.—J. C. Madden will rebuild glass factory reported burned; plan to divide into 10-acre farms, with experimental farm for settlers' use, and to establish a village.

Grafton, W. Va.—Gloves and Shirts.—B. S. Dobbins, Pittsburg, Pa., proposes establishment of shirt and glove factory in Grafton.

Houston, Texas—Boats.—W. M. Griffin and Ira Peveto, Beaumont, Texas, will, it is reported, establish marine ways and shipyard in Houston for building and repairing boats.

Jacksonville, Fla.—Jacksonville Gas Co., H. B. Hoyt, general manager, has purchased five-and-a-half-acre site and will erect gas plant to replace present structure.

Kansas City, Mo.—Gas Fixtures.—Bailey-Reynolds Gas Fixture Co. will erect plant to cost about \$30,000.

Kansas City, Mo.—Incandescent Lamps.—Incandescent Lamp Co. incorporated with \$500 capital stock by M. E. Davis, M. F. Elzroth and J. E. Trogion.

Lagrange, Ga.—Automobiles.—Company organized with F. M. Ridley, Jr., president, and W. W. Wisdom, secretary-treasurer, to establish plant for manufacturing automobiles.

Lexington, Ky.—Tents and Awnings.—Southern Tent & Awning Co., 157 East Short St., Lexington, and 219 West Market St., Louisville, Chas. B. Wise, president, has increased capital stock from \$600 to \$20,000, no building.

Littleton, N. C.—Bottling.—Littleton Bottling Co. incorporated by H. E. Walker, T. R. Walker, Jr., and W. C. Boyd.

Lonoke, Ark.—Rice Mill.—Lonoke Rice Mill Co. incorporated with \$100,000 capital stock by P. H. Wheat, Jr., R. G. Kirk, W. Y. Bransford and others.

Louisville, Ky.—Butter.—Louisville Butter Co. incorporated with \$10,000 capital stock by F. Senn, T. A. McDonald and John Knobel.

Louisville, Ky.—Disinfectants.—Apollo Chemical Co., recently reported incorporated, will manufacture chemical specialties; Frank T. Caumissar, president; Joseph Spielberger, vice-president; Jacob Spielberger, treasurer; factory, 112-116 South 15th street; office, 1501 Fifth street.

Lumberton, N. C.—Soda Water.—Robeson Soda Water Co. incorporated with \$5000 capital stock by R. E. Lee, T. A. McNeill, Jr., W. J. Prevatt and others.

Macon, Ga.—Gasoline Plant.—Georgia Lighting Co., recently noted under "Electric-light and Power Plants" as being organized by A. J. Smith, will conduct general gasoline lighting distributing business. (See "Machinery Wanted.")

Memphis, Tenn.—Plaster.—National Plaster & Material Co. incorporated with \$20,000 capital stock by J. E. Walden, J. W. Howard, E. M. Forbes and others; will establish plant with capacity of 25 tons of plaster daily; equipment for refining clay and dry ing sands will be installed; company will make specialty of new fireproof materials and will also manufacture wood fiber.

Montgomery, Ala.—Extracts and Syrups.—Ex-Cel-O Company organized with \$10,000 capital stock; A. B. Henry, president; H. L. Herring, vice-president; T. M. Vass, secretary and treasurer; will manufacture extracts and syrups for soda fountains.

Nashville, Tenn.—Paper Boxes.—Rock City Paper Box Co. has completed construction of solid concrete factory building with 20,000 square feet floor space, and is installing new machinery to manufacture paper boxes; capacity to be 20,000 boxes daily.

Norfolk, Va.—Distillery.—Silver Distilling Corporation incorporated with \$5000 capital stock; N. L. Stedman, president, Halifax, N. C.; W. A. Topping, vice-president; W. G. Gurganus, secretary and treasurer; both of Norfolk.

Norfolk, Va.—Chemicals.—Relief Manufacturing Co. incorporated with \$25,000 capital stock; M. A. Dodson, president; L. D. Dodson, vice-president; E. M. Dodson, secretary.

Norfolk, Va.—Paper.—Mathers-Lamm Paper Co. incorporated with \$25,000 capital stock; R. E. Mathers, president, 110 East 20th St., Baltimore, Md.; W. Seton Kemp, vice-president, 23 Florida Ave. N. W.; I. L. Lamm, secretary and treasurer, both of Washington, D. C.

Norton, Va.—Mattresses, etc.—Norton Mattress & Manufacturing Co. incorporated with \$25,000 capital stock; L. O. Pettit, president, Big Stone Gap, Va.; J. J. Body, vice president and general manager; George Jenkins, secretary and treasurer, both of Norton.

Paducah, Ky.—Coal Barges.—West Kentucky Coal Co., Sturgis, Ky., will establish shipyards in Paducah for constructing 500 coal barges for company's use.

Philadelphia, Pa.—Electric Lamps.—Hough ton Arc Light Co., 1203 Race St., contemplates locating electric-lamp factory in South; location not decided; proposes investment of \$40,000 for land, buildings and machinery.

Pond Creek, Okla.—Hale Manufacturing Co. incorporated by John P. Hale, Mare E. Hale and Iva C. Hale.

Raleigh, N. C.—Awnings.—R. A. White, Newport News, Va., will establish awning factory at Raleigh.

Raleigh, N. C.—Drugs.—Acme Drug Co. organized with \$50,000 capital stock; G. M. Bell, Wendell, N. C., president.

Richmond, Va.—Distillery.—Darbytown Distilling Co. will rebuild plant reported burned, consisting of office, gratuorum, mill, distilling-room, Government bonding warehouse and engine-room; loss about \$12,000.

Roanoke, Va.—Mattresses.—Lynchburg Lounge Manufacturing Co., Lynchburg, Va., will establish branch plant in Roanoke for manufacturing mattresses.

Roxobel, N. C.—Suspenders, Surgical Bandages, etc.—Dr. P. C. Jenkins contemplates manufacture of suspenders, garters, trusses, suspensory bandages, etc. (See "Machinery Wanted.")

Shawnee, Okla.—Creamery, etc.—Blue Ribbon Creamery & Ice Cream Co., recently incorporated, takes over partnership and continues manufacture of butter and ice-cream; capacity of plant, 2000 pounds butter daily and 40 gallons cream per hour; may install chemical refrigeration and change power from steam to electricity or gas; H. B. Chase, president; L. E. Chase, secretary-treasurer. (See "Machinery Wanted.")

St. Louis, Mo.—Chemicals.—Midvale Chemical Works incorporated with \$5000 capital stock by Nina Y. Carter, Valle V. Oberle and Wilson W. Selbert.

St. Louis, Mo.—Adding Machines.—Gatewood Adding Machine Co. organized with \$250,000 capital stock by Ethelbert P. Lampkins, St. Louis; William W. Locke and William F. Gatewood, both of Pierce City, Mo.; will erect factory building, to cost about \$20,000, and equip for manufacture of adding machines patented by Mr. Gatewood; location of plant not decided, but considering St. Louis.

St. Louis, Mo.—Empire Manufacturing Co. incorporated with \$6000 capital stock by Remy J. Stoffel, Oscar G. Hausner and others.

St. Louis, Mo.—Cigarettes.—Omar Oriental Tobacco Co. incorporated with \$100,000 capital stock by Meredith M. Stockton, Earl Holden and A. G. Meier.

St. Louis, Mo.—Shoes.—Peters Shoe Co. awarded contract to Murch Bros. Construction Co., St. Louis, for erection of factory building; 300x52 feet; five stories; brick and fireproof construction; steam-heating plant; automatic-sprinkler system; electric elevators; one-story power-house annexed to main building; cost about \$150,000; plans by Clymer & Drischler, St. Louis. (Recently mentioned.)

Tampa, Fla.—Galvanized Shingles.—Fish Shell Manufacturing Co. organized by J. Gruber and Morris Cracowener to establish plant for manufacture of galvanized shingles patented by Mr. Gruber; factory room has been rented and is being equipped.

Temple, Texas—Ice-cream.—A. Bender has purchased ice-cream plant of T. B. Noel; will install additional machinery to increase capacity.

Wheeling, W. Va.—Sausage.—J. W. Sears has purchased sausage plant of H. C. Wert, Rayland, Ohio, and will remove it to Wheeling.

Wheeling, W. Va.—City is considering three plans for proposed new gas plant to be installed; one for coal gas, another water gas, and third combination of water and gas; cost from \$80,000 to \$100,000. Address The Mayor.

#### RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

Baumont, Texas.—Texas & New Orleans Railroad, A. V. Kellogg, engineer maintenance of way, Houston, Texas, contemplates, it is reported, expending about \$200,000 in establishment of terminal facilities at Beaumont; buildings will include brick 16-stall roundhouse, repair and machine shop, and probably yard office. (Recently mentioned.)

Bristol, Va.—Tenn.—Virginia & Southwestern Railway, J. H. McCue, manager, Bristol, contemplates, it is reported, enlarging shops at Bristol.

Jacksonville, Fla.—Seaboard Air Line Railroad, W. L. Seddon, chief engineer, Portsmouth, Va., has completed plans for remodeling freight yards, expending about \$25,000;

improvements will include laying of new tracks, between which macadam driveway, 27 feet wide, will be laid. Receivers have offices at 401 Continental Trust Building, Baltimore, Md. (Recently mentioned.)

#### ROAD AND STREET IMPROVEMENTS

Atlanta, Ga.—Nicholson Sons of Atlanta have contract to construct 50-foot macadamized road from East Lake Country Clubhouse to Georgia Railroad, distance of one and one-half miles, where it will connect with Ponce de Leon avenue in Druid Hill Park; cost \$8000; Ponce de Leon avenue through the park will also be paved.

Baltimore, Md.—Colonial Park Estates Co., L. G. Turner, 208 Union Trust Bldg., will soon begin laying cement pavements; 5000 linear feet, about 4 feet wide; opening and grading 3000 linear feet of streets and other improvements to its suburban property; \$10,000 available for expenditure.

Baltimore, Md.—Board of Awards awarded contract to F. E. Schneider & Co., 332 Law Bldg., Baltimore, at \$21,983, for sheet asphalt to be used in repair work on streets.

Charlotte, N. C.—Finance Committee of City Council appropriated \$3000 for new cement sidewalks in fire limits; has not decided when work will begin or amount to be done; Joseph Firth, City Engineer.

Chattanooga, Tenn.—City awarded contract to Southern Paving & Construction Co., First National Bank Bldg., Chattanooga, at \$4,869.70, for paving about 12,000 square yards on East Main street with vitrified brick; Board of Public Works, H. T. Van Dusen, chairman, decided to widen McCallie avenue. (Recently mentioned.)

Coalgate, Okla.—City will construct 10 miles of concrete sidewalks; contracts will probably soon be awarded; D. D. Brunson, Mayor.

Coffeyville, Miss.—City contemplates concrete sidewalk paving. Address The Mayor or P. M. Woodall.

Corinth, Miss.—City has voted \$9000 of bonds for street improvements, including graveling streets and laying brick crossings; J. P. Collier, Mayor.

Covington, La.—City awarded contract to F. F. Planch of Covington for grading 15 miles of streets.

Cullman, Ala.—Cullman county has defeated \$150,000 bond issue for road improvements. Address County Commissioners. (Recently mentioned.)

Cumberland, Md.—City will grade and pave about 750 feet on North Lee street; estimated cost \$5070; bids will be opened March 1; L. Schadt, City Engineer. (See "Machinery Wanted.")

Dallas, Texas.—Municipal Commissioners ordered bids for paving of North Ervay street from Bryan to Ross street; bids are invited until March 5 on various kinds of paving materials, including bitulithic; J. M. Preston, City Engineer. (See "Machinery Wanted.")

El Paso, Texas.—City awarded contract for laying of pavement (Warren Bros. bitulithic) to amount of approximately \$185,000; construction begun; Percy McGhee, City Clerk. (Mentioned in December.)

Graham, N. C.—Almane county is having location surveys made and expects to soon advertise for bids on grading and macadamizing of about \$200,000 worth of roads; no contracts awarded; Gilbert C. White, Durham, N. C., is engineer. (T. D. Scruggs, Durham, N. C., recently incorrectly noted as having contract for grading.)

Greenwood, S. C.—City awarded contract to Bowe & Page, Augusta, Ga., at \$45,170.28 for paving public square with vitrified brick; Kenneth Baker, Mayor. (Recently mentioned.)

Holdenville, Okla.—City has voted \$9000 of bonds for street improvements. Address The Mayor.

Hondo, Texas.—Medina county will vote April 6 on issuance of \$40,000 road and bridge bonds. Address County Commissioners.

Houma, La.—City awarded contracts for electric-lighting plant to Erie City Iron Works, Erie Pa., Fort Wayne (Ind.) Electric Works and Wesco Supply Co., St. Louis, Mo. (Anderson Offutt, New Orleans, La., recently mentioned as to supervise construction of electric-light plant.)

Laurel, Miss.—City will vote April 6 on issuance of \$10,000 of bonds for street improvements. Andrew Flanagan, City Clerk.

Lockhart, Texas.—Commissioners' Precinct No. 1 petitioned Caldwell County Commissioners for election to vote on issuance of \$50,000 of bonds for road construction; cost about \$200 per mile; action postponed until February 25.

Meridian, Miss.—City will pave streets; probable that bids will be advertised for within next 30 to 60 days; C. W. O'Leary, City Clerk.

Mobile, Ala.—General Council authorized issuance of \$320,000 of bonds for street paving. Address The Mayor. (See "Water-works.")

Moultrie, Ga.—City will vote on issuance of \$50,000 of bonds to improve streets, etc. Address The Mayor. (See "Water-works.")

New Orleans, La.—Board of Control of New Basin Canal and Shellroad, Walter C. Murphy, superintendent, will advertise for bids April 1 for improvements contemplated on roadway; new road and rebuilt levee will cost about \$105,000; New Orleans Levee Board will pay about \$60,000 of cost.

New Orleans, La.—City awarded following contracts for street paving: Southern Bitulithic Co., Nashville, Tenn., for bitulithic paving on Joseph street, \$33,970.50; Espalade avenue, \$28,312.50; Robert street, \$5,565.80; Walnut street, \$38,824; Etta Contracting Co., for Ursuline street, small granite block, \$2739.50; Calliope street, granite block, \$24,555.40; R. S. Blome Company, Chicago, Ill., Lopez street, from Tulane to Poydras street, granite, \$31,709.65; Lopez street, from Tulane to St. Louis, granitoid, \$70,699.40; W. J. Hardee, City Engineer. (Recently mentioned.)

Norfolk, Va.—Ballentine Realty Co. awarded contract to Perry W. Ruth of Norfolk to lay one mile of granolithic sidewalks; contract price, \$30,000.

Opelousas, La.—City awarded contract to R. C. Huston of Huston & Cunningham, engineers, 725 Maison Blanche Bldg., New Orleans, La., for construction of about 35,000 square feet of cement sidewalks and 7000 linear feet brick curbing; estimated cost, \$10,000; M. Halphen, Mayor. (Recently mentioned.)

Orange Park, Fla.—City has voted \$5000 of bonds for street improvements. Address The Mayor.

Orlando, Fla.—City will gradually pave principal streets with vitrified brick, finishing first Pine, Central and Church streets, now partly paved; work will be done under supervision of Mr. Bennett, street superintendent, and will proceed as funds are secured; no bids will be asked; city is continuing its work of laying concrete and tile sidewalks, about five miles now being completed; William H. Jewell, Mayor.

Perry, Fla.—City will vote March 16 on \$15,000 bond issue for street improvements; John C. Calhoun, County Clerk.

Paris, Texas.—City will vote March 23 on issuance of \$25,000 of bonds for street paving; contract will be let March 22 for paving to amount of \$15,000 to \$25,000; O. B. McKnight, City Secretary. (See "Paving" in "Machinery, etc., Wanted.")

Shawnee, Okla.—City Clerk Morton has been instructed to advertise for bids for paving 30 additional blocks with asphalt.

Sparta, Tenn.—White county will vote March 20 on issuance of \$50,000 of bonds for road construction. Address County Commissioners.

Staunton, Va.—Augusta County Board of Supervisors appropriated \$4500, balance necessary to build proposed 12-foot macadam road over Blue Ridge Mountains from Basic City to Brooksville, distance of eight miles; Albemarle and Nelson counties have agreed to assist in construction.

St. Louis, Mo.—City awarded following contracts for street paving, totaling about \$190,222: James T. McMahon of St. Louis, for Newhouse avenue, \$3584.80, and Ball street, \$9024.44; Barber Asphalt Paving Co., for Minerva avenue, \$56,779.97; Trinidad Asphalt Manufacturing Co., Iowa avenue, \$11,036.16; Parker-Washington Company, 4800 Duncan Ave., St. Louis, Missouri avenue, \$7929.98; Harry F. Heman of St. Louis, Paris avenue, \$6677.13; Suburban avenue, \$3584.80; Sarah street, \$3193.90; Plymouth avenue, \$3123.90; 22d street, \$4544.90, and Lexington avenue, \$7522.31; Granite Bituminous Paving Co., Maple avenue, \$5079.55; Marcus avenue, \$12,685.64; Norfolk avenue, \$23,278.45, and Pendleton avenue, \$23,791.38; all contractors of St. Louis; bids for paving various streets with brick, including Virginia, Daggett, Cadet, Ohio and Michigan avenues, etc., will be opened March 9.

Sulphur, Okla.—City proposes to issue from \$100,000 to \$200,000 street-improvement bonds. Address The Mayor.

Victoria, Texas.—City contemplates bond issue of \$25,000 for street improvements and school; H. Higgins, clerk.

Savannah, Ga.—Street and Lanes Committee of City Council awarded contract to Venable Bros., Atlanta, Ga., through Gadsden Contracting Co. of Savannah, at 98½ cents

per square yard for supplying Georgia granite block to be used in paving Hull and Cohen streets; total cost about \$4925. (Recently mentioned.)

#### SEWER CONSTRUCTION

Baltimore, Md.—Colonial Park Estates Co., L. G. Turner, 208 Union Trust Bldg., contemplates construction of sewer system; plans not yet ready.

Camden, Ark.—City contemplates construction of sewer system in western part of city, creating Sewer District No. 4; E. H. Carson, Mayor.

Chandler, Okla.—Burns & McDonald, Kansas City, Mo., have prepared plans for construction of sewer system; vote on \$25,000 bond issue to be held March 8. (Recently noted.)

Clarendon, Texas.—City awarded contract for construction of sewer system; \$20,000 bonds previously reported voted. Address The Mayor.

Dublin, Ga.—City will extend sewer system. Address The Mayor.

Eddy, Texas.—Missouri, Kansas & Texas Railway, A. A. Allen, general manager, St. Louis, contemplates construction of terminals at Eddy; reported \$200,000 is appropriated.

Elk City, Okla.—City has voted \$35,000 of bonds for extension of sewer system, etc. Address The Mayor. (See "Water-works.")

Graymont, P. O. Birmingham, Ala.—City has voted \$10,000 of bonds for extending sanitary-sewer system about 7000 feet; Milner & Browne, Birmingham, are engineers. (Recently mentioned.)

Holdenville, Okla.—City has voted \$35,000 of bonds for construction of sewer system. Address The Mayor. (Recently mentioned.)

Jellico, Tenn.—City will petition Legislature for authority to vote on issuance of \$30,000 of bonds for construction of sewer and water-works systems. Address The Mayor.

Jesup, Ga.—City contemplates issuance of bonds for installation of sewerage system. Address The Mayor.

Kinston, N. C.—City is considering issuance of \$75,000 of bonds for extension of sewer system, etc. Address The Mayor. (See "Water-works.")

Louisville, Ky.—Bids will be opened March 5 for construction of Section "B" of Castlewood Sewer, Contract No. 26, on comprehensive system of sewerage; work will consist mainly of building concrete sewer about 270 feet long, size 36 to 42 inches, depth 9 to 18 feet, and including about 675 cubic yards of concrete; Harrison P. Eddy, consulting engineer, 14 Beacon St., Boston, Mass.; W. C. Nones, chairman Sewer Commissioners, Equitable Bldg. (See "Machinery Wanted.")

Moultrie, Ga.—City will vote on issuance of \$50,000 of bonds to complete sewer system, etc. Address The Mayor. (See "Water-works.")

Mt. Sterling, Ky.—Mayor Harris appointed committee to receive plans for sewer system.

Perry, Fla.—City will vote March 16 on bond issue of \$15,000 for sewer construction; John C. Calhoun, County Clerk.

Prescott, Ark.—City contemplates construction of sewerage system; J. A. Bailey, County Clerk.

Tonkawa, Okla.—City contemplates expenditure of \$5000 for sewer construction; J. P. Jarolomen, Mayor.

Wagoner, Okla.—City will let contract about March 1 for construction of proposed \$10,000 sanitary sewer system; S. R. Powick, Mayor.

Warren, Ark.—City contemplates bond issue for construction of sewerage system. Address The Mayor.

#### TELEPHONE SYSTEMS

Dowelltown, Tenn.—Riverside Home Telephone Co. incorporated with \$3000 capital stock by B. W. Robinson, James Davenport, Herman Williams and others.

Doxey, Okla.—Beulah Telephone Co. incorporated with \$5000 capital stock by Frank T. Alexander and others. (See "Machinery Wanted.")

Kinston, N. C.—City contemplates voting on \$75,000 bond issue for construction of municipal telephone system, erection of school and market-house buildings, extension of water, light and sewer systems and other improvements. Address The Mayor.

Prattsville, Ark.—Company is being organized by D. M. Kelly to establish telephone system.

Selma, Ala.—Jno. H. Bolinger, 415 Alabama St., contemplates installation of telephone system. (See "Machinery Wanted.")

St. Joseph, Mo.—Citizens' Telephone Co. has increased capital stock from \$1,000,000 to \$2,000,000.

Washington, La.—City has granted franchise to Valley Telephone Co., Warren, Ark., for installation of telephone system in Washington.

#### TEXTILE MILLS

Abilene, Texas.—W. R. Holland of Gulon, Texas, is interested in plan to locate cotton mill at Abilene.

Charlotte, N. C.—Cotton Waste.—The Cotton Fiber Co. incorporated with \$125,000 capital stock by R. K. Blair, C. O. Brown and J. R. McDonald, to manufacture cotton waste from textile mills.

Columbia, Ala.—Cotton Yarns.—A. D. Wood is proceeding with erection of two-story 80x240-foot building reported in December, and of 50x60-foot power-house; will develop 5000 water-horse-power to drive equipment; now contemplates installing 15,000 spindles and leasing completed mill to cotton manufacturers.

Concord, N. C.—Cotton Yarns.—January report that J. M. Odell will build mill was not correct. His proposition is same as Magnolia Mills Co., mentioned in February as to install 2000 spindles.

Creedmoor, N. C.—Knit Goods.—W. B. Lasley is organizing company to build knitting mill.

Elora, Tenn.—Woolen Blankets.—Thompson Land Co. of Huntsville, Ala., is reported as to build woolen mill at Elora, to cost from \$75,000 to \$100,000.

Fayetteville, Tenn.—Cotton Yarns.—Elk Cotton Mills will double producing capacity; plans, specifications and machinery to be furnished by Stuart W. Cramer, Charlotte, N. C.; mill now has 6000 ring spindles, etc.

Glencoe, Ala.—Lagard-Glencoe Industrial Club, W. W. Wester, secretary, will endeavor to form company to build cotton mill.

Griffin, Ga.—Dobby Weaves.—Spalding Cotton Mill, lately reported as to nearly double plant, contemplates enlarging, but has not perfected plans; now has 11,000 spindles and 375 looms.

Lexington, N. C.—Colored Cloth.—Dacotah Cotton Mills preparing to award contract for construction of building; main structure to be 100 by 200 feet; others include dye-house, boiler-house, etc.; reported incorporation in December and stated plan to be installation of 8200 spindles and 250 looms for manufacturing colored cloth; C. A. Hunt, Jr., principal organizer.

McAdensville, N. C.—Cotton Yarns.—McAden Mills will install 3000 spindles additional in No. 3 mill; contract has been awarded.

Meridian, Miss.—Hosiery.—Alden Knitting Mills, New Orleans, La., will build knitting mill lately mentioned; will erect brick building.

Oella, Ga.—J. A. J. Henderson, J. L. Paulk, J. E. Howell and others are organizing a cotton mill company to be capitalized at \$150,000.

Poteau, Okla.—Poteau Cotton Mills organized to establish plant lately mentioned; W. A. Campbell, president; G. H. White, vice-president; I. P. Clark, treasurer; O. Layne, secretary.

Selma, N. C.—Cotton Yarns, etc.—Ethel Cotton Mill incorporated to build plant; has begun erection of building and will equip with 5280 spindles and accompanying equipment; all contracted for; is now operating 60 knitting machines for hosiery; will dye hosiery production; M. C. Winston, president; C. W. Richardson, vice-president, and W. D. Anderson, secretary.

Trenton, Tenn.—Hosiery Yarns.—Trenton Cotton Mill has awarded contract, at about \$12,000, for additional machinery, to include roving, slubbing, intermediate fly frame and other equipment.

Zebulon, N. C.—Hosiery Yarns.—Southern Spinning & Manufacturing Co., reported incorporated, etc., last month, has engaged Fred S. Hinds, 19 Milk St., Boston, Mass., as architect-engineer for proposed plant; 5000 spindles, etc., for manufacturing hosiery yarns; president, Archibald Meldrum.

#### WATER-WORKS

Atlanta, Texas.—City will vote April 6 on issuance of \$15,000 of bonds for construction of water-works. Address The Mayor.

Baltimore, Md.—Board of Estimates approved plans of Fire Board for fire-service pipe-line system in section bounded on north by Franklin street, on south by Pratt street, on west by Eutaw street, and on east by North and South streets, estimated to cost \$687,500; arrangements made whereby it will

not be necessary to defer building of new engine-houses, except one proposed for Charles and Barnett streets, which will give Board \$75,000 additional; \$130,000 remains to credit of \$1,000,000 fire loan not as yet set aside for any purpose, which will be added to pipe-line fund, and so appropriated in ordinance of estimates for 1910; erection of fireboat station at foot of Covington street will be deferred for present, which will mean saving of additional \$20,000, also to be added to pipe-line account; D. B. Banks, 203-205 Maryland Savings Bank Bldg., Baltimore, is engineer; Edward M. Parrish, president Board of Fire Commissioners. (Recently mentioned.) Board of Awards let contract to Joseph Schamberger, 2122 East Baltimore St., Baltimore, at \$23,890, for construction of water-tower station No. 2 on South Gay street, which is first contract awarded in connection with system. Fire Board, in conference with Daniel D. Banks, 203-205 Maryland Savings Bank Bldg., consulting engineer, and George W. Horton, chief engineer of board, considered preparations of plans for pipe line.

Baltimore, Md.—Colonial Park Estates Co., L. G. Turner, 208 Union Trust Bldg., is completing arrangements for construction of proposed system of water-works.

Berlin, Md.—City will open bids March 16 for construction of water-works and electric-light systems; Dodge & Day, Washington Bldg., Philadelphia, Pa., are engineers; Orlando Harrison, Mayor.

Birmingham, Ala.—T. H. Friel of North Birmingham petitioned City Council for water franchise. Maury Nicholson, City Engineer.

Booneville, Ark.—Booneville Light & Water Co., previously reported incorporated, is having plans and specifications prepared by W. A. Fuller, Chemical Bldg., St. Louis, Mo., for water-works system. It will construct in connection with electric-light plant; bids will probably be received about April 1; water-power-electric plant will be installed; between \$100,000 and \$150,000 will be expended; John P. Thayer, president.

Cleveland, Tenn.—City will vote March 20 on issuance of \$60,000 of bonds; \$50,000 for purchase of Cleveland Water Co.'s plant and \$10,000 for extension of mains and improvements; Charles S. Mayfield, Mayor. (Recently mentioned.)

Coalgate, Okla.—City contemplates issuing \$25,000 of bonds for extension of water-works. D. D. Brunson, Mayor.

Colquitt, Ga.—City has engaged J. B. McCrary & Son, Atlanta, Ga., as engineers for improvements to be made to water-works; L. E. Calhoun, Mayor. (Bond issue of \$15,000 lately reported voted.)

Corinth, Miss.—City has voted \$8000 of bonds for water-works improvement; water-works machinery to be overhauled, reservoir erected and pressure pump purchased and installed; J. P. Collier, Mayor.

Corpus Christi, Texas.—City contemplates issuing \$37,000 of bonds for construction of water-works. O. O. Wright, City Secretary.

Elgin, Texas.—City appointed J. W. Maxey, Houston, Texas, engineer in charge of constructing water-works, for which \$30,000 of bonds were recently reported voted.

Elk City, Okla.—City has voted \$35,000 of bonds for construction of water-works, extension of sewer system and erection of city hall and fire station. Address The Mayor.

Holdenville, Okla.—City has voted \$45,000 of bonds for extension of water-works. Address The Mayor. (Recently mentioned.)

Indiana, Miss.—City has accepted plans by Huston & Cunningham, engineers, 725 Maison Blanche Bldg., New Orleans, La., for improvements to water-works; plans accepted are for gasoline engine, 60 horse-power, direct connected with underwriter's pump, capable of delivering 500 gallons per minute against working pressure of 100 pounds; also for 250,000-gallon reservoir, brick powerhouse and city hall, about 1500 feet eight-inch water pipe, including river crossing; contracts will be let about middle of March; expenditure about \$10,000.

Jefferson City, Mo.—Missouri Electric, Gas & Water Co. incorporated by Harry B. Tyson and others. (See "Electric-light and Power Plants.")

Jellico, Tenn.—City will petition Legislature for authority to vote on issuance of \$30,000 of bonds for construction of water-works and sewer system; water can be brought by gravity to high hill above city, and from reservoir on this hill there will be 100-pound pressure on Main street. Address The Mayor. (J. B. McCrary & Co., Atlanta, Ga., recently mentioned as having made plans for gravity system water-works.)

Kinston, N. C.—City contemplates voting

on issuance of \$25,000 of bonds for extension of water, light and sewer systems, erection of market-house and school building and construction of municipal telephone system. Address The Mayor.

Laurel, Miss.—City will vote April 6 on issuance of \$10,000 of bonds for extension of water-works system. Andrew Flanagan, City Clerk.

Leesburg, Fla.—City is considering construction of water-works. Address The Mayor.

Madisonville, Ky.—City contemplates selling within 60 or 90 days franchise for water-works; I. N. Vickers, Mayor.

Marcelline, Mo.—City has engaged George W. Sturtevant, 1208 Fisher Bldg., Chicago, Ill., as consulting engineer for water-works. (Mentioned in November.)

Mart, Texas.—Bids are invited for purchase of all material necessary in construction of water-works, which will include steel water tower, return tubular boilers, water-works and boiler-feed pumps, etc.; O'Neill Engineering Co., Wilson Bldg., Dallas, Texas, is engineer; R. W. Bass, Mayor; bond issue of \$50,000 recently reported voted. (See "Machinery Wanted.")

Millsap, Texas.—George M. Hall is organizing company with \$10,000 capital stock to construct water-works.

Mission, Texas.—Conway & Holt contemplate installation of 350-horse-power centrifugal pumping plant; are considering both steam and producer gas.

Montezuma, Ga.—City will construct water tank. Address The Mayor.

Moultrie, Ga.—City will vote on issuance of \$50,000 of bonds to extend water mains, complete sewer work and improve streets. Address The Mayor.

Murphy, N. C.—City contemplates issuance of \$30,000 to \$40,000 of bonds for water-works; survey is being made. Address The Mayor.

Opelika, Ala.—City is prepared to receive correspondence relative to furnishing water and lighting; W. C. Robinson, City Clerk.

Paintsville, Ky.—Paintsville Water & Light Co., recently reported incorporated with \$300,000 capital stock, will construct two-story fireproof concrete building to cost \$3000, and reservoir to cost \$6000; equipment to include open suction double pump; capacity of plant, 200,000 gallons; bids for machinery to be opened within 30 days; officers are J. K. Crawford, president; George A. Glenn and William Neuman, probably all of Philadelphia, Pa.; W. T. Griffith, Pikesville, Ky., is architect and engineer in charge. Address George A. Glenn & Son, 921 North 8th St., Philadelphia, Pa., for information regarding equipment to be purchased.

Palmetto, Fla.—City awarded contract to R. D. Cole Manufacturing Co., Newman, Ga., for 100-foot water tower and tank, and to Coats Plumbing & Supply Co., Tampa, Fla., for engine pump and pipe; \$15,000 bonds voted; E. F. Wilson, Mayor. (Recently mentioned.)

Paris, Texas.—City will vote March 23 on issuance of \$10,000 of bonds for installing filtration plant at water-works; O. B. McKnight, City Secretary. (Previously mentioned.)

Pensacola, Fla.—City granted franchise to Robert L. Graveley of Mobile, Ala., and Pensacola, Fla., for construction of proposed water-works system in East Pensacola; 10,000-gallon plant to be erected; construction to begin soon. (See "Machinery Wanted.")

Rosebud, Texas.—Huston & Cunningham, engineers, 725 Maison Blanche Bldg., New Orleans, La., have contract for building water-works system at Rosebud, estimated to cost \$15,000, and are contracting for materials and construction work. (Previously mentioned.)

Shattuck, Okla.—City has voted \$50,000 of bonds for construction of water-works; bids for equipment to be opened March 8, as lately stated; O'Neill Engineering Co., Dallas, Texas, is in charge.

Tallulah, La.—City is considering construction of water-works, so built as to permit of addition of electric-light plant in future; artesian well will probably be source of supply; cost about \$12,000; details not decided. G. H. Ogbourne, Mayor.

Waynesville, N. C.—City will extend and improve water system, for which \$25,000 bond issue is available; J. L. Ludlow, Winston-Salem, N. C., has been chosen engineer.

Williamsport, Md.—City will build storage cisterns for fire department. Address The Mayor.

Tonkawa, Okla.—City contemplates extension of water-works at cost of \$13,500; J. P. Jarolemon, Mayor.

## WOODWORKING PLANTS

Bellington, W. Va.—Handles.—Company incorporated with \$10,000 capital stock by Abe Lazarus, W. S. Shurtliff and E. A. Barte; will establish handle factory.

Chickasha, Okla.—H. A. Cotton, Iuka, Miss., will establish wagon factory in Chickasha.

Durant, Okla.—Handles, Boxes and Crates. John P. Bramhall is promoting establishment of factory in Durant for manufacture of handles, boxes, crates, etc.

Fulton, Ark.—Oars.—Arkansas Boat Oar Co., Little Rock, Ark., reported to establish plant in Fulton.

Gideon, Mo.—Staves.—O. B. Gwyn Slack Barrel Stave Co. incorporated with \$5000 capital stock by O. B. Gwyn and W. P. Anderson.

Grays, Ky.—Staves.—Grays Stave Co. incorporated with \$15,000 capital stock by F. J. Fetterers and others.

Griffin, Ga.—Buggies.—Norman Buggy Co. organized with \$50,000 capital stock; W. G. Norman, president; Douglas Boyd, vice-president; R. H. Weaver, secretary and treasurer; company is consolidation of Elk Buggy Co., Griffin, and Norman Buggy Co., Covington, Ga.; factory building erected and equipped. (Mentioned in October.)

Gulfport, La.—General Woodworking.—Dahlstrom & Puleston, Amite City, La., will, it is reported, establish woodworking plant at Gulfport.

High Point, N. C.—Furniture.—High Point Associated Furniture Lines incorporated with \$125,000 capital stock by S. H. and C. F. Tomlinson and the Tomlinson Chair Manufacturing Co.

Jacksonville, Fla.—Wood Novelties.—Palmetto Novelty Manufacturing Co., Daytona, Fla., proposes establishment of plant in Jacksonville for manufacturing furniture and novelties from cabbage palmetto trees.

Manchester, Va.—Furniture.—American Cabinet Manufacturing Co. incorporated with \$50,000 capital stock; A. T. Quick, president; R. C. Blackford, secretary, both of Lynchburg, Va.; William Baldwin, manager and treasurer, Manchester.

Monette, Ark.—Monette Stave Co. incorporated with \$15,000 capital stock; B. W. McCowen, president; W. S. Skelton, vice-president; U. O. Ashby, secretary and treasurer.

Montgomery, Ala.—Woodenware.—Charles A. Wortham Company, Dayton, Ohio, contemplates, it is reported, establishment of branch plant for manufacturing woodenware.

Mt. Pleasant, Tenn.—Chairs and Furniture.—United States Stave & Lumber Co., M. E. Wheeler, president, contemplates erection of chair and furniture factory.

Murfreesboro, Tenn.—Handles, etc.—Murfreesboro Rim and Handle Works organized with A. C. Johnson president and W. H. Vick secretary; will establish plant for manufacturing hickory handles, carriage rims, elm hoops, etc.

Norfolk, Va.—Barrels.—Eure Cooperage Co. incorporated with \$50,000 capital stock; B. B. Halstead, president, Norfolk; C. H. Keys, vice-president, New York; J. H. Schleigel, treasurer, Norfolk.

Silver City, Miss.—A. J. Vincent will, it is reported, establish plant for manufacturing tight-barrel staves.

St. Louis, Mo.—Furniture.—Franklin Furniture Co. incorporated with \$50,000 capital stock by Jacob Lasky, Edward Lasky and Bernard Greensfelder.

Sublime, Texas—Staves.—William Wayte will establish, it is reported, plant for manufacturing crate and barrel staves.

Suffolk, Va.—Buggies, etc.—Parker Manufacturing Co. is name of company recently noted (as E. Parker) to establish factory at Suffolk; Geo. W. Nurney, president; Geo. W. Butts, vice-president; H. E. Parker, treasurer and general manager; will erect \$8000 building; plans by manager; ordinary construction; five stories; 60x100 feet; electrical equipment to be installed; will manufacture buggies, surreys, etc.; daily capacity, 10 vehicles. (See "Machinery Wanted.")

## BURNED

Adairsville, Ga.—Clarence Kerr's corn, saw and sorghum mills.

Annapolis, Md.—McDowell Hail property of St. John's College; loss about \$40,000; Dr. Thomas Fell, president.

Arlington, Ga.—Southern Cotton Oil Co.'s oil mill and ginnery; loss about \$40,000; main offices, New York city.

Bryan, Texas.—City Hall; address The Mayor; second floor used as opera-house by John Mike.

Campton, Ky.—Combs Hotel, loss about \$4000.

Charlotte, N. C.—Leland Hotel damaged; loss about \$5000.

Charlottesville, Va.—Mrs. Belle Goss' residence, "Bellevue"; loss about \$4000.

Cordell, Okla.—Chickasha Cotton Oil Co.'s gin.

Donaldsonville, Ga.—Sharpe Liagan Company's naval stores plant.

Fort Worth, Texas.—J. C. Madden's glass factory; loss about \$72,000.

Gatesville, Texas.—Bennett Hotel; loss \$4000.

Greenville, Miss.—Cohn, Witney & Goldfarb's department store damaged; loss about \$10,000.

Guin, Ala.—James Pierce's gin and saw-mill; loss about \$5000.

Meridian, Miss.—Meyer Bros. Wholesale Co.'s building; loss about \$25,000.

Mobile, Ala.—Empire Laundry Co.'s plant; loss about \$10,000.

Mt. Pleasant, Tenn.—Tennessee Cooperage Co.'s heading mill, near Mt. Pleasant; loss about \$2500.

Nacogdoches, Texas.—Watson Hotel; loss \$7500.

Nacogdoches, Texas.—Watson House, operated by Mrs. M. S. Watson; loss on building \$6000.

New Hebron, Miss.—T. T. Price's store building; loss \$9700.

New Orleans, La.—Office building owned by Mrs. M. E. O'Donnell, 15 Rosa Park, damaged; loss about \$5000.

Norfolk, Va.—Air Line Manufacturing Co.'s furniture factory; loss \$75,000.

Plainview, Texas.—Hale County Herald's plant; loss about \$6000.

Richmond, Va.—The Journal Co.'s evening newspaper printing plant and office building; loss \$50,000 on plant; loss \$15,000 on building, owned by James Hartley.

Richmond, Va.—Darbytown Distilling Co.'s plant; loss about \$12,000.

Vossburg, Miss.—Donald Springs Hotel; A. J. Weems, Jr., proprietor.

West, Texas.—Leyl Poteet's flour mill; loss about \$10,000.

## BUILDING NOTES

### APARTMENT-HOUSES

Atlanta, Ga.—Mrs. T. S. Lewis is having plans prepared by Edwards & Walter, Candler Bldg., Atlanta, for 12-apartment building; three stories; brick veneer; cost \$40,000.

Baltimore, Md.—New York Central Realty Co., William H. Cooper of Siegel-Cooper Company, New York, president, will erect apartment at Edgecombe Park; J. Appleton Wilson, Law Building, Baltimore, will prepare plans. (See "Miscellaneous Enterprises.")

Chattanooga, Tenn.—Thomas H. Wagner will erect four-family apartment-house on Pine street.

Chattanooga, Tenn.—Thos. H. Wagner, Temple court, contemplates erection of brick apartment-house on lot with 100-foot front; plans probably decided by April 1; dwelling to be erected on adjoining lot. (See "Dwellings.")

Chattanooga, Tenn.—E. E. Dewees, 714 Market St., is considering preliminary plans for erection of apartment-house on Pine street; details undecided.

Danville, Va.—W. A. Coleman and Garland Peed, both of Norfolk, Va., are promoting erection of apartment-house in Danville.

Houston, Texas.—Mrs. J. W. Jones awarded contract to Brooks-Gordon Construction Co. of Houston for erection of apartment-house; 75x100 feet; pressed-brick front; cost about \$20,000; plans by R. D. Steel of Houston.

Kansas City, Mo.—R. B. Kirwan, 1012 Scarritt Bldg., will erect apartment-house; vitrified-brick walls; Carthage stone trimmings; six apartments on each floor, each of which will have five rooms, with bath and reception rooms; interior finish in oak; tile flooring in bathrooms and vestibules; marble stairways; dining-rooms to have beamed ceilings; refrigerators in kitchens; cost about \$22,000; steam heat; electric and gas lighting; Edgar P. Madore of Kansas City is architect.

Louisville, Ky.—Frank W. Quast of Quast Shoe Co. will erect apartment-house; probably cost \$25,000.

Nashville, Tenn.—J. H. Reeves, 206 Court Sq., awarded separate contracts for erection of apartment-house recently mentioned; four apartments; brick structure; slate roof; hot-water heat; cost \$15,000; plans by C. K. Colley, Nashville.

St. Louis, Mo.—Catherine Investment Co. purchased site with frontage of 120 feet on which to erect three double apartment-houses.

St. Louis, Mo.—Richard H. W. Godwin contemplates erecting two apartment-houses; three stories; brick; six apartments of seven rooms; expenditure, about \$50,000.

St. Louis, Mo.—A. Sandbothe will erect apartment-house to cost \$4500.

Tulsa, Okla.—Dr. A. C. Smith will erect apartment-houses recently mentioned; two buildings, each 44x53 feet, two stories, having four flats of six rooms; basements; laundry; mill construction; natural-gas heating and lighting; cost \$10,000 each; construction by owner.

Washington, D. C.—Bates Warren, 416 5th St. N. W., will erect apartment house on Columbia road; five stories; fireproof; brick and stone; site 100x160 feet; estimated cost, \$100,000.

Washington, D. C.—Ben H. Bradford, 1336 New York Ave. N. W., has plans prepared by Wood, Donn & Denning, 808 17th St. N. W., Washington, for apartment-house at 21st and R streets; modified Spanish type of architecture; seven stories; 60x55 feet; granite base to be built up about half height of first floor, above which walls will be of rough red brick laid in thick mortar joints; at level of fifth floor will be broad cornices of stone and terra cotta, and above that walls will be ornamented by pilasters; this portion of building will have stucco finish; roof, to be covered with red tiles, will overhang several feet from face of structure; cornices beneath overhanging portion of roof will be of copper; each of six upper floors to be occupied by single suite of rooms; bathrooms; passenger and freight elevators. (Recently mentioned.)

Washington, D. C.—L. A. Barr, owner Wyoming Apartment-House, is having plans prepared by B. Stanley Simmons, 331 F St. N. W., Washington, for addition, probably in rear of main portion of present building; structure to be 100 feet wide and 60 feet deep; seven stories; 29 apartments, ranging from two rooms to ten rooms each; elevator; estimated cost, \$100,000.

### BANK AND OFFICE BUILDINGS

Austin, Texas.—George W. Littlefield, president American National Bank, purchased site for \$80,000 on which it is contemplated to erect seven-story office building.

Beaumont, Texas.—Wells-Fargo & Co., Dudley Evans, president, will erect depot office building at Beaumont; one story; brick; cost less than \$5000. (Recently mentioned under "Miscellaneous Structures.")

Blum, Texas.—Farmers' State Bank, W. T. Herrick, president, will erect bank building; contract awarded.

Brookport, P. O. Paducah, Ky.—A. L. Lasister, Paducah, is preparing plans and specifications for bank building at Brookport.

Chilhowie, Va.—National Bank of Chilhowie will rebuild bank building recently reported burned; fireproof structure; plans by W. P. R. Pember and C. B. Kearfoot, Bristol, Va.-Tenn.; bids to be opened March 10.

Dallas, Texas.—Harry L. Seay, purchaser of Cockrell Building, is having plans prepared by H. A. Overholt of Dallas for remodeling structure; elevator and heating apparatus included in improvements.

Dallas, Texas.—C. C. Slaughter will open bids February 27 for erection of two additional stories to present five-story structure known as Slaughter Building, and for construction of annex; latter to be seven stories; 25x90 feet; fireproof steel construction; 100 feet high; old building will be remodeled and will conform to new building, with which it will be joined; expenditure about \$100,000; C. W. Bulger & Son, Dallas, are architects. (Recently mentioned under "Miscellaneous Structures.")

Dallas, Texas.—A. D. R. Collie and S. W. King, Jr., will erect office building; three stories; pressed-brick walls; mill construction; equipped with heat, light, water, etc.

Fort Worth, Texas.—Chicago, Burlington & Quincy Railroad, W. L. Breckinridge, Chicago, Ill., engineer maintenance of way, reported to erect 10-story office building in Fort Worth.

Grenada, Miss.—Grenada Bank awarded contract to J. F. Barnes, Jackson, Miss., for erection of bank and office building; two stories and basement; 104x40 feet; stone and brick; ordinary fireproof construction; steam

heat; electric lighting; hot-water heating; contract price \$24,200; plans by Harry N. Austin, Jackson, Miss. (Recently mentioned.)

Harriman, Tenn.—Manufacturers' National Bank awarded contract to Geo. T. Hood & Co., 52 Chamberlain Bldg., Chattanooga, for erection of proposed \$35,000 bank building; two stories and basement; brick; composition roof; tile floor in bank; oak and hard pine interior finish; brick mantels; plumbing; steam heat; gas and electric lighting; marble, steel and iron to be used; construction in about three weeks; plans by contractors.

Jacksonville, Fla.—R. L. and J. L. Crigler, Covington, Ky., awarded contract to Hadlow & Co., Jacksonville, for erection of office and warehouse; plans by McClure & Holmes, Jacksonville. (See "Warehouses.")

Kansas City, Mo.—Wallace M. Ryner, and Joseph H. Stone have leased site 100x120 feet and will erect storage and office building for merchandise brokers and manufacturers; eight stories; fireproof; reinforced concrete.

Kansas City, Mo.—J. C. Gates will erect five-story fireproof building, 96x115 feet, for office purposes; walls to permit of seven additional stories; plans by A. B. Anderson, New York Life Bldg., Kansas City.

New Orleans, La.—Kennedy & Adkins, architects, Suite 707 Second National Bank Bldg., Cincinnati, Ohio, and 814 Maison Blanche Bldg., New Orleans, advise that general contract for erection of Audubon Building Co.'s store and office building was not awarded to General Supply & Construction Co. of New York, as recently stated, but that separate contracts were awarded for various supplies and construction, with exception of contract for elevators and steel stack, and these will probably be awarded within a few days; C. R. M. Burroughs, representative of Kennedy & Adkins, is in charge of work on building, with office at 814 Maison Blanche Bldg.

Oklahoma City, Okla.—Bankers' Trust Co., Joseph Moore, president, contemplates, it is reported, erection of 14-story steel frame office building, to cost about \$60,000.

Pine Bluff, Ark.—John B. Speers, president Citizens' Bank, will erect bank and office building.

Richmond, Va.—American National Bank has engaged Wyatt & Nolting, Keyser Bldg., Baltimore, Md., to prepare plans for 10-story office building recently noted; first floor to be used by bank; fireproof structure; steam heat; electric lighting; electric elevators; cost \$200,000.

San Antonio, Texas.—Edward Seeling, Austin, Texas, will erect five-story steel building, to cost about \$300,000, at San Antonio.

Sapulpa, Okla.—Theodore Berryhill purchased site with frontage of 100 feet on which to erect five-story building; reinforced concrete; cost about \$100,000; plans are being prepared.

Seminary, Miss.—Bank of Seminary awarded contract to E. E. Collins, Morton, Miss., for erection of bank building; two stories; press brick.

Sevierville, Tenn.—Banking company organized by L. C. McMahan, James W. McMahan and others contemplates erecting brick bank building.

Starke, Fla.—Dr. N. W. Francis will erect office building; 30x35 feet; artificial stone; contract awarded Carlyle Peck of Starke.

Temple, Texas.—City National Bank will have plans and specifications prepared by Fort Worth architects for three or four story bank and office building, to cost about \$60,000.

Washington, D. C.—Harper & Co., 1515 16th St. N. W., will erect office building at 1406 G street; 10 stories; marble front; upper floors to contain about 70 offices; site 40x70 feet; cost about \$200,000; temporary offices are at 1415 G street.

White Springs, Fla.—Suwanee River Bank, H. S. McCallum, president, awarded contract to Leslie & Johnson (probably of White Springs) for erection of bank building; brick front; 50x75 feet.

### CHURCHES

Aberdeen, Miss.—M. E. Church South, W. E. M. Brogan, pastor, is having plans prepared by R. H. Hunt, James Bldg., Chattanooga, for brick edifice to cost \$35,000; details not given.

Auson, Texas.—Building committee, A. W. Johnson, secretary, will receive bids until March 9 for erection of two-story brick edifice according to plans and specifications on file with Mr. Johnson and with Sam P. Herbert, architect, Waco, Texas; certified check,

\$100, payable to Thomas D. Goodwin, president.

Augusta, Ark.—J. H. Conner, chairman of committee, will receive bids until March 3 for erection of pressed-brick slate-roof building; plans at office of Mr. Conner in Augusta and of Charles L. Thompson, architect, Little Rock, Ark.; certified check, \$250.

Beaumont, Texas.—St. Anthony's Church, Rev. Wm. J. Lee, pastor, will not erect edifice. (Recently incorrectly reported.)

Chattanooga, Tenn.—D. W. Stroop of Chattanooga is preparing plans and specifications for chapel to be erected on Walden's Ridge; J. Milton Browne, B. F. Fritts and L. W. Bates appointed trustees.

Chattanooga, Tenn.—St. James' M. E. Church, W. F. Plits, pastor, Rossville and Read Aves., is receiving proposals for completion of edifice; tower and Sunday-school room built; auditorium to be 50x54 feet; brick with stone trimmings; slate roof; concrete footings and walls; probably steam heat; gas and electric lighting, cost about \$10,000; plans by D. A. Reamer, First National Bank Bldg., Chattanooga.

Conway, Ark.—First Baptist Church has had plans prepared by C. L. Thompson, Little Rock, Ark., for edifice; frontage 80 feet; main auditorium to accommodate 600 persons, and Sunday-school adjoining to provide 500 additional seats; 21 Sunday-school classrooms; pressed brick; stone trimmings; bldgs on foundation and brick work will be advertised for at once; Rev. J. J. Hurt, pastor and chairman building committee. (Recently mentioned.)

Covington, Tenn.—First Baptist Church, Rev. W. H. Major, pastor, will enlarge and improve edifice; will make structure two stories high and double auditorium; estimated cost \$15,000.

Danville, Va.—Jewish Congregation purchased site with frontage of 112 feet, on which to erect synagogue to cost about \$7000; Rev. S. B. Schein is rabbi.

Enid, Okla.—First Methodist Episcopal congregation awarded contract to D. C. Bass of Enid at \$35,337 for erection of church building; contract does not include heating plant; light wiring, plumbing, etc.; total cost estimated at \$50,000.

Harmony, S. C.—Baptist congregation, Rev. J. Q. Adams, pastor, awarded contract to W. T. Brasington, Wadesboro, N. C., for erection of edifice to cost about \$10,000.

High Point, N. C.—First Reformed Church has had plans prepared for edifice. Address The Pastor, First Reformed Congregation.

Hillsboro, Texas.—First Methodist Episcopal Church will erect edifice. T. C. Armstrong, Waxahachie, Texas, presiding elder, Bluefield, W. Va. (Recently mentioned.)

Kansas City, Mo.—St. James congregation is having plans prepared by Edgar C. Faris of Kansas City for edifice; Romanesque style of architecture; 83x67 feet; Carthage limestone; red tile roof; seating capacity of auditorium, 400; estimated cost, \$65,000.

Kansas City, Mo.—Holy Name Church has had plans prepared by Wilder & Wright of Kansas City for edifice; length, 166 feet; width, 67 feet at nave and 101 feet at transept; Bedford stone; 130-foot spire; Sunday-school room in basement; cost \$150,000.

Long Beach, Miss.—M. E. Church South, L. E. Alford, pastor, will erect edifice; 60x90 feet; main auditorium, 52x56 feet; Sunday-school room, 40x40 feet; basement, 40x40 feet; 12 classrooms; brick and stone; estimated cost, \$15,000; plans have not yet been accepted and contract will not be awarded for about three months. (Recently mentioned.)

Lumberton, N. C.—Methodist Church will have plans and specifications prepared by Henry E. Bonitz, Wilmington, N. C., for erection of brick edifice.

Parkersburg, W. Va.—First M. E. Church, Rev. M. F. Compton, pastor, opened new bids for erection of edifice, previously mentioned; structure to be brick or stone; plans by G. W. Kramer of New York.

Prattville, Ala.—Episcopal congregation will erect brick edifice. Address The Pastor, Episcopal Church.

Prattville, Ala.—Methodist Church will erect edifice to cost about \$40,000. Address The Pastor, Methodist congregation.

Savannah, Ga.—Sisters of Mercy are having plans prepared by H. W. Witcover of Savannah for erection of memorial chapel at St. Joseph's Hospital; 30x90 feet; Gothic design; exterior of pressed brick and stone; surmounted by lantern belfry at intersection of gable roofs; interior hardwood finish; floors of tile; vaulted ceilings; marble altar and sanctuary steps; four stained-glass windows on each side and three above

altar; Mr. Witcover also preparing plans for extension of hospital. (See "Miscellaneous Structures.")

Sumter, S. C.—Catholic congregation is having plans and specifications prepared for edifice; brick; stone trimmings; 100x50 feet; cost about \$15,000. Address Rev. Charles D. Wood.

Winchester, Ky.—M. E. Chapel on Mt. Abbot will erect church building to cost about \$3500. Address The Pastor, M. E. Chapel.

### COURTHOUSES

Christiansburg, Va.—Montgomery County Supervisors awarded contract to M. B. Moore of Cambria, Va., at \$19,550 for remodeling and enlarging courthouse; H. H. Huggins, Roanoke, Va., architect, will supervise construction. (Recently mentioned.)

Coalgate, Okla.—Coal county will soon vote on issuance of \$75,000 of bonds for erection of courthouse. Address County Commissioners.

Leesville, La.—Vernon parish awarded contract to H. B. Hull Construction Co., Jackson, Miss., at \$57,685 for erection of courthouse. (Mentioned in November.)

Snyder, Texas.—Pending sale of courthouse bonds, Scurry county has not yet engaged architect to prepare plans for structure recently noted to be erected at cost of \$70,000; A. S. Lowe, Commissioner.

Stanford, Ky.—Lincoln county's courthouse will be three stories; 100x150 feet; steam heat; contract awarded F. Krueger & Son, Mount Vernon, Ky., as recently stated; plans by Milburn, Heister & Co., Home Life Bldg., Washington, D. C.

Sweetwater, Texas.—Nolan County Commissioners awarded contract to George Lamb of Sweetwater for erection of concrete fireproof building for county records and office for County Clerk.

Suffolk, Va.—Nansemond county will have plans prepared by John K. Peebles, Norfolk, Va., for enlargement and improvement of courthouse.

Welch, W. Va.—McDowell county awarded contract to Smith Bros., architects and contractors, Huntington, W. Va., for erection of stone annex, 48x70 feet, to courthouse; plans and specifications prepared by W. E. & E. L. Shadelberger, architects, Bluefield, W. Va. (Recently mentioned.)

### DWELLINGS

Anderson, S. C.—W. P. Wright's residence (recently mentioned) will be of ordinary construction; seven rooms; open fireplaces; electric and gas lighting; cost \$3000; plans by Sayre & Baldwin, Anderson. (See "Machinery Wanted.")

Atlanta, Ga.—Gov. Hoke Smith will erect residence in Druid Hill Park to cost \$5,000.

Atlanta, Ga.—Ronald Ransom will erect residence in Druid Hill Park.

Atlanta, Ga.—A. W. Dunn, Forrest Adair, W. F. Campbell and St. Elmo Massengale will each erect residence in Druid Hill Park.

Baltimore, Md.—George M. Singer is having plans prepared by Jacob F. Gerwig, 210 E. Lexington St., Baltimore, for five dwellings on Kate avenue; two stories; brick; each lot 15x105 feet.

Baltimore, Md.—George A. Cook, 2747 N. Calvert St., has purchased old Waverly car barn property at York road and Carroll avenue; will divide into building lots and erect number of dwellings.

Baltimore, Md.—Louis J. Roth, Gaither Estate Bldg., has purchased site containing 51 lots at Forest Park and will erect 51 dwellings, to cost about \$6000 each.

Baltimore, Md.—A. S. Lewis has had plans prepared by E. A. Moller, 1617 Harlem Ave., Baltimore, for residence on Frederick avenue; 16x70 feet; two stories; slate roof; foundation heavy bluestone laid in cement; steam heat; electric lights; cost about \$4000.

Baltimore, Md.—E. A. Blackshear, Union Stockyards, is having plans prepared by M. H. Murray, 1700 N. 10th St., W. Baltimore, for six dwellings on Chesapeake avenue; 22x150 feet; foundations of heavy blue stone; slate roofs; cost about \$14,000.

Baltimore, Md.—Edward J. Afferty, 210 East Lafayette Ave., will erect residence on Roslyn avenue; two and a half stories; granite front.

Baltimore, Md.—Edward Gallagher, 2537 East Monument St., will erect 41 dwellings; 18 on Lakewood avenue, 12x42 feet, to cost about \$20,000; 12 on Glover street, 12x28 feet, cost about \$8400, and 11 on Eastern avenue, 14x47 feet; cost about \$15,400.

Baltimore, Md.—R. H. Frazier & Son, 220 St. Paul St., purchased old car barn site at Cumberland street, Pennsylvania avenue and

Division street, and will erect 70 dwellings; cost about \$140,000.

Birmingham, Ala.—L. C. Morris has had plans prepared by Miller & Martin, Birmingham, for residence; two stories; brick veneer; furnace heat; electric and gas lighting; bids for construction to be opened about March 1; cost \$12,000.

Birmingham, Ala.—Birmingham Realty Co. awarded contract to S. Dombey, Birmingham, for erection of residence recently mentioned; hot-air heat; electric lighting; cost \$3500; plans by D. O. Whildon, 711 Title Guarantee Bldg., Birmingham.

Chattanooga, Tenn.—John Shamotulski, 1123 William St., Chattanooga, awarded contract to C. H. Graham, 20 W. Main St., Chattanooga, for erection of two-story-and-basement private residence on Lookout Mountain (suburb); brick and stone; slate roof; tile floor to front porch; concrete floor in basement; hard pine interior finish; cabinet mantels; modern plumbing; steam heating plant; acetylene gas lights; building completed to top of first story; cost about \$10,000.

Chattanooga, Tenn.—Robert Davidson, 811 Market St., Chattanooga, has purchased a lot at Riverview (suburb) and will erect residence; plans not made.

Chattanooga, Tenn.—Thos. H. Wagner, Temple court, contemplates erection of double brick dwelling on lot with 50 foot front; definite plans probably by April 1. (See "Apartment-houses.")

Chattanooga, Tenn.—W. L. Marquet, 11 West 8th St., will erect (in May or June) \$500 residence at 1910 Vine street; foundations laid; one-story structure; brick; slate roof; tile floor to porch; plumbing; hot-water heat; gas and electric lighting; plans by F. C. Gerald, formerly of Chattanooga.

Chattanooga, Tenn.—Dr. R. C. Graham, 81½ Market St., Chattanooga, is receiving proposals through C. H. Graham, contractor, 20 W. Main St., Chattanooga, who prepared plans, for erection of two-story-and-basement brick dwelling at 509 E. Fourth St., Chattanooga; first story glazed brick and second ordinary brick and stucco; tin-shingle roof; concrete floor in basement; oak floors in first story; hard pine interior finish; six cabinet mantels; modern plumbing; hot-air heating plant; gas and electric lighting; cost about \$500.

Chevy Chase, Md.—Dr. James J. Clark, 4 Iowa Circle N. W., Washington, D. C., is having plans prepared by Schneider & Hale, Washington, for residence at Chevy Chase; 2½ stories; Colonial type; slate mansard and decked roof; electric lights; furnace heat; site 125x125 feet.

Florence, Ala.—Harry Austin will erect \$3500 residence.

Florence, Ala.—H. B. Austin, contractor and builder, will erect for himself a \$3500 residence; frame; concrete foundations; hot-water heat. (See "Machinery Wanted.")

Greenville, S. C.—E. J. Gage will erect residence to cost \$3500.

Greenwood, S. C.—Mrs. J. E. Sirrene will erect \$3000 residence.

Greenwood, S. C.—B. T. McKellon will erect two-story residence; Colonial design; 10 rooms; cost \$7500; plans by Cothran & Cotheran, Masonic Temple, Greenwood.

Greenwood, S. C.—W. H. Yeldell, Sr., will erect residence.

Hawkinsville, Ga.—W. W. Poole has had plans prepared by and awarded contract to W. D. McEachern, Hawkinsville, for erection of eight-room residence. (Recently mentioned.)

Hill City, Tenn.—T. L. Wilson, 601 Broad St., Chattanooga, awarded contract to C. O. Rogers, 308 East Curtis St., East Chattanooga, for erection of proposed \$3800 brick dwelling; concrete foundation; brick; two stories and basement; slate roof; oak and hard pine interior finish; tile porch; cabinet mantels; plumbing; gas and electric lighting; flue for hot-water heat; plans by Chas. E. Bearden, Chamberlain Bldg., Chattanooga.

Jackson, Ga.—E. L. Smith, recently noted to award contract to H. F. Gilmore, Jackson, for erection of residence, will erect structure three stories; brick and frame; 10 rooms and hall; two verandas; mill construction; grates; electric lights; cost \$10,000.

Kansas City, Mo.—J. W. Sherlock has had plans prepared by Edward & Sunderland, Kansas City, for residence; three stories; Phoenix cut stone up to second floor; cement plaster from stone to roof; red tile roofing; 43x36 feet; art glass vestibule doors; boller-room, storeroom, laundry and billiard-room in basement; walls of billiard-room rough stone, and granite floor; cost about \$15,000.

Memphis, Tenn.—Robert Cohn awarded contract to Joseph Bartl & Son, Memphis, for erection of residence; two stories; pebble

dash; cost, exclusive of heating, wiring and plumbing, \$5700.

Memphis, Tenn.—W. P. Chapman will erect residence; two stories; frame; seven rooms; cost, exclusive of heating, wiring and plumbing, \$5000.

Memphis, Tenn.—Mrs. Annie Loague will erect residence; two stories; eight rooms; brick; gravel roof; cost \$2800, exclusive of heating, wiring and plumbing.

Memphis, Tenn.—R. Overby will erect residence; two stories; stone veneered; eight rooms; cost \$4800, exclusive of heating, wiring and plumbing; owner builder.

Nashville, Tenn.—Abb Landis awarded separate contracts for erection of two-story-and-basement residence recently mentioned; hot-air heat; gas and electric lighting; cost \$9600; plans by C. K. Colley, Nashville.

New Orleans, La.—William B. Reilly, care of Reilly-Taylor Company, 640 Magazine St., has had plans prepared by Crosby & Henkel, 705 Morris Bldg., New Orleans, for residence; two stories; frame; electric and gas lighting.

Norfolk, Va.—John W. Nash awarded contract to John W. Jones, Norfolk, for erection of residence; frame; cost about \$3000.

Norfolk, Va.—R. P. Denly will erect three double brick two-story residences; cost about \$20,000.

Petersburg, Va.—C. T. Lassiter awarded contract to W. W. Laffoon for erection of three modern dwellings on Kenilworth Addition; contract cost, \$4000; plans by M. P. Andrews & Co., Box 163, Petersburg, Va.

Petersburg, Va.—M. E. Church awarded contract to J. C. Rowel, Petersburg, for addition and alterations to parsonage; cost \$2400; plans by M. O. Andrews & Co., Box 163, Petersburg.

Raleigh, N. C.—R. B. Raney will erect residence near Ivy Cliff.

Reidsville, N. C.—C. A. Penn has had plans prepared by W. L. Brewer, Greensboro, N. C., for residence; recently mentioned; hot-water heat; cost \$7000.

Richmond, Va.—John H. Lyons will erect residence.

Richmond, Va.—Mrs. George M. West will erect residence.

St. Louis, Mo.—Dwight F. Davis will erect residence; two stories; brick and stone; cost \$53,000.

St. Louis, Mo.—Celestine Realty & Construction Co. will erect eight two-story dwellings, to cost \$35,000.

St. Louis, Mo.—E. R. Hensel will erect three-story residence; cost \$13,000; size 37x37 feet; English style; mill construction; hot-water heat; gas and electric lighting; contract awarded.

St. Louis, Mo.—Ivory Realty Co. will erect two-story residences, to cost \$10,000.

St. Louis, Mo.—H. McHale will erect three two-story dwellings; cost \$13,000.

Washington, D. C.—John R. Wellington, 1706 Rhode Island Ave. N. W., has purchased site on Connecticut avenue northwest and will erect residence.

Washington, D. C.—Mrs. Helen Candee, 1718 Rhode Island Ave. N. W., is having plans prepared by Nathan Wyeth, 1517 H St. N. W., Washington, for residence on 16th street northwest; site 30x95 feet.

Washington, D. C.—H. R. Howenstein, 1314 F St. N. W., has had plans prepared by F. T. Schneider, 1314 F St. N. W., Washington, for five dwellings on Adams street; brick; four to contain six rooms and bath, one eight rooms; first floors finished in oak, second floors in birch; electric lights; ordinary construction; hot-water heat; gas and electric lights; cost \$15,000; owner builder.

Washington, D. C.—E. O. Castell, 9 Eastern Market, awarded contract to G. W. Backman, Washington, for erection of six dwellings on A street southeast; two stories; brick; cost about \$15,000.

Washington, D. C.—C. B. Hight, Colorado Bldg., has had plans prepared by A. H. Beers, 1333 G St. N. W., Washington, for four dwellings on Pennsylvania avenue northwest; two stories; brick; cost \$6000.

Washington, D. C.—H. A. Kite, 1333 G St. N. W., has had plans prepared by A. H. Beers, 1333 G St. N. W., Washington, for nine dwellings on Florida avenue northwest; two stories; brick; furnace heat; gas lighting; cost about \$12,000; owner builder.

Waycross, Ga.—John M. Hopkins awarded contract to Virgil Parker, Waycross, for erection of residence; steam heat, water and sewerage systems.

Winchester, Ky.—J. Q. Boone will erect residence.

Winston-Salem, N. C.—James S. Dunn has purchased site 100x200 feet and will erect residence.

## GOVERNMENT AND STATE BUILDINGS

Americus, Ga.—Custom-house.—U. S. Government awarded contract for erection of custom-house to George Becking, James Bldg., Chattanooga, Tenn.; two-story structure; brick and marble; slate roof; tile and concrete; lavatories and closets; hot-water heating; gas and electric lighting; terra-cotta trimming; steel, iron and fireproofing to be used; cost \$70,000 to \$75,000. (Mr. Becking recently noted as lowest bidder.)

Annapolis, Md.—Ward Buildings.—Bids will be received at Bureau of Yards and Docks, Navy Department, Washington, D. C., until March 20 for constructing one general ward and two isolation ward buildings at United States Naval Hospital, Annapolis, Md. Plans and specifications can be obtained on application to bureau or to commandant of navy yard named. R. C. Hollyday, chief of bureau.

Fort Monroe, Va.—Buildings.—J. H. Brinson, Hampton, Va., lowest bidder at \$21,770 for erection of two single sets of field officers' quarters; William G. Morris, Phoebe, Va., at \$3100 on heating and plumbing, and Samuel J. Watson, Hampton, Va., on electrical wiring; Ernest R. Tilton, Captain and Quartermaster, U. S. A., Constructing Quartermaster. (Recently mentioned.)

Fort Howard, Md.—Barrack.—Barrack building at Fort Howard, for which Benjamin F. Bennett Building Co., 123 South Howard St., Baltimore, was recently mentioned as having contract, will be two stories; 145x30 feet; fireproof; steam heat; electric lighting; cost about \$40,000.

Manchester, Va.—Postoffice.—Barnes Bros., Hamilton, Ohio, have contract at \$41,200 for erection of U. S. postoffice at Manchester; exterior brick work to be completed during summer. (Mentioned in December.)

National Soldiers' Home, Va.—Storehouse, etc.—R. H. Richardson & Son, Hampton, Va., have contract to erect commissary storehouse, toolhouse and power-house, and John W. Danforth Company of New York has contract for electrical apparatus; contract price about \$300,000; R. H. Richardson & Son also have contract for tunneling work around home reservation, made necessary through installation of power plant.

Ruston, La.—Postoffice.—Treasury Department, office of Supervising Architect James Knox Taylor, Washington, D. C.—Sealed proposals will be received until March 31 for construction of U. S. postoffice at Ruston, in accordance with drawings and specifications, copies of which may be had at this office or at office of postmaster at Ruston, at discretion of architect.

Salisbury, N. C.—Postoffice.—George W. Ashley Company, 408 S. Charles St., Baltimore, Md., lowest bidder, at \$117,000, for erection of United States postoffice at Salisbury. (Recently mentioned.)

## HOTELS

Atlanta, Ga.—A. Ten Eyck Brown of Atlanta will prepare plans and specifications for 100-room addition to Piedmont Hotel. (Recently mentioned.)

Fort Worth, Texas.—E. B. Daggett is having plans prepared by Louis R. Weinman of Fort Worth for erection of hotel; three stories; basement; 75x100 feet; cost about \$50,000.

Galveston, Texas.—Henry Sheffield, Jr., and associates awarded contract to Bowden & Worth of Galveston for erection of hotel on beach; three stories; 45 rooms; entire structure to be stuccoed; stucco to be of cement plaster applied 1½ inches thick on metal laths; 60x118 feet; octagon front; galleries will extend 68 feet on east and west sides and 58 feet on south side, with average width of about eight feet; lobby to be 14 feet wide and 72 feet long; will contain cold-storage room, laundry-rooms, etc.; roof to be metal shingled, with glass skylight over lobby; estimated cost \$45,000. (Previously mentioned.)

Galveston, Texas.—H. H. Kopperl, owner of Royal Hotel, has had plans prepared by H. C. Cooke & Co., Texas, for enlargement and remodeling of hotel; three stories will be added, making structure seven stories high; additional stories will be supported by structural steel frames, to be constructed inside present walls, which will rest upon reinforced concrete foundation; cost of improvements about \$50,000.

Hamlin, Texas.—Ten Thousand Club can give information regarding erection of three-story brick hotel; plans and specifications are being received, and it is stated that contract will soon be awarded.

Jacksonville, Fla.—A. M. Endel, Telfair Stockton, Dr. J. Y. Durkee, all of Jacksonville; W. L. Wilson, Green Cove Springs, Fla., and others will erect commercial and

tourist hotel; fireproof; eight stories; 200 rooms; 100 private bathrooms; roof garden and auditorium; plans prepared by J. H. W. Hawkins of Jacksonville, and have been accepted.

Kansas City, Mo.—White & Dreyfoos will erect hotel; 125x125 feet; three stories; vitrified brick.

Marion, S. C.—Milton McLaurin has leased McMillan Building; will remodel as hotel.

McKinney, Texas.—Owner Commercial Hotel will erect three-story annex.

Miami, Fla.—Gus A. Miller, proprietor of Hotel San Carlos, will build addition to hotel.

Odenville, Ala.—W. T. Brown is interested in erection of hotel; 50x100 feet; fireproof; pressed brick; contract for brick awarded.

Petersburg, Va.—J. M. Hanrahan, proprietor, will make extensive alterations to Chesterfield Hotel; M. P. Andrews & Co., architects, Box 163, Petersburg.

## MISCELLANEOUS STRUCTURES

Baltimore, Md.—Natatorium, Hall, etc.—James W. Clayton, 444 Equitable Bldg., will erect natatorium and dance hall at North avenue and Lovegrove alley; two stories; 125x303 feet; first floor will contain swimming pool; steam, cold and shower baths; second floor will be dance hall.

Baltimore, Md.—Stable.—Graham Storage Warehouse Co., Park Ave. and Dolphin St., will erect stable in Jenkins alley; brick and stone; mill construction; concrete foundation; slag roofing; 25x72 feet; two stories; cost about \$3000.

Batesville, Ark.—Home.—Grand Lodge, I. O. O. F., of Arkansas has had plans prepared by Charles Thompson, Batesville, for addition to Widows and Orphans' Home; 42x70 feet; two stories and attic; veneered with pressed-brick finish; 25 rooms; slate roof; front and rear verandas; electric lighting; boiler heat; 30 or 40 radiators; cost about \$12,000; construction under supervision of Ois Capelin, superintendent of home. (Recently mentioned. See "Machinery Wanted.")

Beaumont, Texas—County Jail.—Jefferson county awarded contract to W. C. Whitney, Beaumont, for repairing county jail at Beaumont; cell and steel work furnished by Stewart Jail Works Co., Cincinnati, Ohio; Charles Miller, Little Rock, Ark., representative. (Recently mentioned.)

Beaumont, Texas—County Jail.—Jefferson county awarded contract to W. C. Whitney, Beaumont, for repairing county jail at Beaumont; cell and steel work furnished by Stewart Jail Works Co., Cincinnati, Ohio; Charles Miller, Little Rock, Ark., representative; cost \$7500; R. W. Wilson, County Judge. (Recently mentioned.)

Braddock Heights, Md.—Amusement Building.—Braddock Heights Casino Co. organized with \$12,000 capital stock; Richard P. Ross, president; Stephen H. Bennett, treasurer; will erect amusement building, to contain skating rink, bowling alleys, cafe, etc.

Birmingham, Ala.—Stores.—McDavid & Owen awarded contract to E. M. Lester & Co., Birmingham, Ala., for erection of two-story brick building recently mentioned; ordinary construction; electric lighting; freight elevators; cost \$6000.

Chattanooga, Tenn.—Store, etc.—Chattanooga Electric Co., 120 E. Eighth St., awarded contract to T. S. Moudy, James Bldg., Chattanooga, for remodeling of leased building at 719 Market St., for general offices and display, sales, repair and storage rooms. (Recently mentioned.)

Chattanooga, Tenn.—Mercantile Building.—Stone Fort Land Co. is having plans prepared by W. T. Downing, James Bldg., Chattanooga, for mercantile building on Georgia avenue, to be occupied by Davenport Bros.; five stories and basement; 50x170 feet; brick; electric lights; one freight and one passenger elevator; heavy, slow-burning mill construction; automatic sprinklers; front finished with cut stone and brown pressed brick; heavy plate-glass windows; one passenger and one freight elevator; contract for brick work awarded to R. L. Westcott, Chattanooga; for carpenter work to Adams & Schneider, Chattanooga, and for plumbing and heating to Fred Fox, Jr., Chattanooga; construction under supervision of architect; cost about \$50,000.

Chilhowie, Va.—J. W. Heninger awarded contract to J. S. Morris, Chilhowie, for erection of store building to replace burned structure; two stories; brick; 30x60 feet; cost \$4000.

Chilhowie, Va.—Furniture, etc.—J. S. Morris will rebuild furniture and undertakers' building recently burned.

Chilhowie, Va.—Business Block.—H. L.

Bonham reported to contemplate erection of business block.

Chilhowie, Va.—Hardware.—W. H. Copenhave & Co. will rebuild structure recently burned.

Chilhowie, Va.—Drugs.—B. P. Sanders will rebuild structure recently burned; two-story brick building; 30x76 feet; steam heat; acetylene-gas lighting; cost \$3000; bids opened March 15.

Clarkdale, Miss.—Elks' Home.—Building committee Clarkdale Lodge No. 977, B. P. O. Elks, will receive competitive plans and specifications until March 15 for Elks' Home; cost not to exceed \$25,000; C. B. Bowers, secretary.

Enid, Okla.—Business Building.—L. P. Teemey will erect two-story brick business building.

Front Royal, Va.—Masonic Temple.—Masonic Lodge will expend \$16,000 in erection of temple recently mentioned; plans by C. F. Linthicum, Durham, N. C.; brick and stone structure; G. H. Bowman, Front Royal, to be addressed.

Gilmer, Texas—Jail.—Upshur county has not yet had plans prepared for jail recently mentioned; building two stories; about 40 feet square; fireproof; cost \$10,000 or \$12,000. Address County Commissioners.

Gulfport, Miss.—Commercial Building.—C. Kohlen, Long Beach, Miss., will open bids March 1 for erection of proposed commercial building, with offices; brick structure; 75x50 feet; cost \$7000; plans prepared.

Gulfport, Miss.—Business Block.—W. G. Evans, Charles Koheer and G. Bertucci will erect block of stores; brick; two stories; cost about \$16,000.

Gulfport, Miss.—Hospital.—Guilford Circle of King's Daughters will erect annex to hospital, to be used for colored patients.

Houston, Texas—Business Building.—Theodore Keller will erect business building; one story; 150x65 feet.

Kansas City, Mo.—Business Building.—Daniel Swearingen will erect business building.

Kansas City, Mo.—Business Building.—Otto Hesse, Leavenworth, Kans., will erect business building; probably three stories.

Knoxville, Tenn.—Store Building.—H. T. Hackney Company will erect addition to building; one story; brick; loading ground, 38x90 feet, under roof; cost about \$6000; H. G. McKiddy, Knoxville, will supervise construction.

Lake Charles, La.—Barn.—Wells-Fargo & Co., main office, 51 Broadway, New York, awarded contract at \$4000 to De Latte & La Grange, Lake Charles, for erection of barn; brick; cement floor; 80x100 feet; plans by A. H. Humphrey, Lake Charles.

Laurel, Miss.—Store Building.—J. B. Bridges will erect store and office building; two stories; brick or reinforced concrete; steam heat; electric lights; cost \$8000.

Lexington, Ky.—Home.—Knights of Pythias, J. W. Carter, Grand Keeper, 707 Trust Bldg., awarded contract at \$15,251 to Williamson & Son, Lexington, for erection of 25-room addition to orphanage.

Louisville, Ky.—Hospital.—Children's Free Hospital will erect new structure to replace present hospital building and will convert old building into nurses' home; new building will be of brick and stone; three stories; cost about \$50,000.

Lumber Bridge, N. C.—Hall.—Lumber Bridge Masonic Building Co. incorporated with \$25,000 capital stock by M. L. Marley, J. L. Shaw and others.

Memphis, Tenn.—Business Building.—F. M. Norfleet of Sledge & Norfleet purchased site 30x230 feet and will erect business building; three stories and basement; lower floor, storerooms; upper floors, offices.

Meridian, Miss.—Business Building.—Meyer Bros. Wholesale Co. will rebuild structure reported burned at loss of about \$35,000.

New Orleans, La.—Shrine Temple.—Jerusalem Temple; H. C. Nally, New Orleans will erect shrine temple.

Nashville, Tenn.—Masonic Building.—Masonic Grand Lodge and Grand Chapter of Tennessee will erect auditorium, seating capacity about 1500, to connect with buildings already erected; architect not selected; fireproof structure; hot-water heat; electric lighting; cost \$15,000 to \$25,000; contract may be awarded or work superintended; A. N. Sloan, Chattanooga, Tenn., may be addressed.

New Orleans, La.—Store Building.—Mayer Israel has purchased site 36x159 feet and will erect store building.

Oklahoma City, Okla.—Business Building.—

J. S. Kerfoot and W. P. Lewis will erect business building; four stories and basement; brick; 55x110 feet.

Oklahoma City, Okla.—Lodge Building.—I. O. O. F. will expend \$100,000 in erection of lodge building recently mentioned; plans are being prepared by Layton, Wemys, Smith & Hawk, Oklahoma City; five-story fireproof structure; 50x140 feet; first floor, stores; offices on second and third floors; lodgerooms above; low-pressure steam heat; electric elevators.

Oklahoma City, Okla.—Business Building.—H. N. Rummel will erect business building; four stories; brick.

Port Arthur, Texas—Stores, etc.—J. C. Reynolds had plans prepared by C. A. Logan, Port Arthur, for two-story business building recently mentioned; 50x80 feet; reinforced concrete; mill construction; electric lighting; cost \$10,000.

Port Arthur, Texas—Business Building.—Port Arthur Realty Co. will erect building with elevator.

Quanah, Texas.—L. Simpson will erect three-story white-brick business building to replace burned structure.

Savannah, Ga.—Hospital.—Sisters of Mercy are having plans prepared by H. W. Whitcover, Savannah, for extension to St. Joseph's Hospital; to contain 27 rooms and laboratories. (See "Churches.")

San Angelo, Texas—Business Building.—Sheriff McConnell and S. W. Merchant will erect business building to replace burned structure.

Silver Creek, Miss.—Drug Store, etc.—B. S. Waller awarded contract to R. T. Ledbetter, Jackson, Miss., for erection of proposed two-story drug store and office building; size, 30x80 feet; ordinary construction; pressed-brick front; cost \$4200; plans by R. E. Lee, Hattiesburg, Miss.

Spartanburg, S. C.—Business Building.—R. Z. Cates awarded contract to E. L. Hertzog, Spartanburg, for erection of business building; three stories; brick; cost about \$15,000.

Tulsa, Okla.—Ratecliff-Sanders Grocery Co. has had plans prepared by J. J. Glanfield, Tulsa, for wholesale grocery building; 120x110 feet; reinforced concrete; fireproof; cost about \$30,000.

Washington, D. C.—Hall.—Columbia Turn Hall Association incorporated with \$50,000 capital stock; A. Spanhoofd, president, 2015 Hillyer Pl. N. W.; Carl Shroeder, vice-president; M. E. Kahler, treasurer, 2818 N St. N. W.; F. E. Mann, secretary, 928 F st. N. W., all of Washington, D. C.; will erect hall for music and athletic purposes.

Washington, D. C.—Store and Dwellings.—Vincen Vaccaro, 744 4th St. N. W., is having plans prepared by Lepley & Nichols, Washington, for store and dwelling at 6th and H streets N. E.; two stories; 20x70 feet; is also preparing to erect two dwellings in 13th street, Sauf's Addition; two and one-half stories, attic and cellar; eight rooms.

Washington, D. C.—Market-house.—Syndicate represented by Harrison Realty Co., 907 G St. N. W., has had plans prepared by Schneider & Hale, Washington, for market-house at 14th and V streets N. W.; two stories; brick; stone trimmings; fireproof; 69x130 feet; first floor divided into 62 stalls; concrete floors; refrigerating and ice-making plant in basement to supply merchants on floor above; each stall will have individual cold-storage vault beneath, temperature of which will be kept at low degree by use of ammonia pipes; ceiling of main floor will be 18 feet high; electrical ventilating fans at either end; six entrances; screened windows and revolving screen doors; second floor, auditorium, 12 feet narrower than first floor, allowing 12-foot skylight along north side of building, forming roof for one-story portion.

Washington, D. C.—D. Carroll Digges, 1802 Belmont Rd., awarded contract to Nichols & Wildman for erection of three two-story dwellings recently mentioned; six rooms and bath; Latrobe stoves; gas lighting; contract for construction awarded to John E. Marshall & Son, 121 Mercer St., Baltimore.

Waycross, Ga.—Jail.—Ware county will soon advertise for bids for erection of jail building recently mentioned; hard pressed brick and reinforced concrete; fireproof; cell portion three stories; jailer's residence two stories. (Address County Commissioners.)

## MUNICIPAL BUILDINGS

Albany, Ga.—City Hall.—City Council has accepted plans by Robinson & Reidy of Savannah, Ga., for city hall and will advertise for bids; structure will be of brick and stone; site, 55x125 feet. (Recently mentioned.)

Albany, Ga.—City Hall.—City has accepted plans by Robinson & Reidy, St. Augustine, Fla., for three-story city hall recently noted to be erected; cost \$30,000; contract to be awarded about March 1; H. A. Tarver, Mayor.

Elk City, Okla.—City Hall and Fire Station.—City has voted \$35,000 of bonds for erection of city hall and fire station, etc. Address The Mayor. (See "Water-Works.")

Harriman, Tenn.—Library.—Paul O. Maratz, First National Bank Bldg., Bloomington, Ill., has been engaged to prepare plans for proposed \$10,000 library building.

Holdenville, Okla.—City Hall.—City has voted \$12,000 of bonds for erection of city hall. Address The Mayor. (Recently mentioned.)

Indianola, Miss.—City Hall.—City has accepted plans by Huston & Cunningham, 725 Maison Blanche Bldg., New Orleans, La., for City Hall. (See "Water-works.")

Kinston, N. C.—Market-house.—City contemplates voting on issuance of \$75,000 of bonds for erection of market-house, etc. Address The Mayor. (See "Water-works.")

Lockhart, Texas—Fire Station and Opera-house.—Fire Department has not yet engaged architect to prepare plans for opera-house and fire station recently mentioned; building to be 50x32½ feet; fireproof; electric lighting; cost \$10,000. Address Jule T. Connally, Lockhart.

Paris, Texas—City Hall.—City will vote March 23 on issuance of \$10,000 of bonds for enlarging and improving city hall; total amount to be voted \$65,000; for school purposes, \$10,000; water-works filter, \$10,000; abattoir, \$10,000; street improvements, \$25,000; O. B. McKnight, City Secretary.

Park, Station Knoxville, Tenn.—Fire Hall.—George F. Barber of Knoxville has completed plans and is now inviting bids (to be opened in about 30 days) for erection of fire hall; two stories; brick; 70x35 feet; slate roof. (Recently mentioned.)

St. Joseph, Mo.—Library.—City will erect Carnegie Library to cost \$25,000. Address The Mayor.

St. Louis, Mo.—Buildings.—Isaac C. Taylor, architect, St. Louis, submitted plans to A. J. O'Reilly, president Board of Public Improvements, for municipal court and jail buildings; former will be 312x231 feet; four stories, with basement and attic; will be composed of main building and five wings, one on each corner and fifth on south side; corner wings to be 18x45 feet, and fifth 50x20 feet; tower 186 feet high; jail will be 41.6x185 feet; five stories, with basement and attic; cost of both structures estimated at \$1,500,000. (Previously mentioned.)

Warren, Ark.—City contemplates erection of library building. Address The Mayor.

## RAILWAY STATIONS

Fort Worth, Texas—Chicago, Rock Island & Pacific Railway, J. B. Berr, chief engineer, Chicago, Ill., has had plans prepared for extension of freight house at Fort Worth, but as yet no authority has been given to do the work. (Recently mentioned.)

Houston, Texas.—F. G. Pettibone, president of Houston Belt & Terminal Co., Galveston, Texas, and R. H. Baker, president of Trinity & Brazos Valley Railway, Houston, Texas, will be in New York this week and inspect at offices of Warren & Wetmore, the architects, detailed plans for passenger terminal station at Houston, recently mentioned; main building as planned will be of structural steel, about 125 feet long, either four or five stories high, and so constructed that additional stories can be added; platforms and train sheds will be erected in rear. If plans are approved they will be forwarded to Houston and examined by executive committee of company, consisting of R. H. Baker, A. H. Elliott and C. B. Rogers, representing several roads interested; following approval, bids will be invited.

Roanoke, Va.—Virginian Railway, H. Fernstrom, chief engineer, Norfolk, Va., will open bids February 25 for erection of passenger station; 32x167 feet; concrete foundation; brick walls, faced with buff pressed brick; slate roof; terrazzo floors; ordinary construction; low-pressure steam heat; electric lighting; cost \$20,000.

## SCHOOLS

Annapolis, Md.—St. John's College, Dr. Thomas Fell, president, will rebuild McDowell Hall, reported burned at loss of about \$40,000.

Ardmore, Okla.—City will vote March 23 on \$100,000 bond issue for school improvements. Address The Mayor.

Atlanta, Ga.—Bishop C. K. Nelson is promoting establishment of girls' college; pro-

posed to erect fireproof structure; three stories; cost about \$50,000.

Athens, Tenn.—City awarded contract at \$11,986 to Athens Planing Mill Co., Athens, for erection of school building recently mentioned; two stories; brick; composition roof; 70x80 feet; assembly hall 40x60 feet; steam heating plant; plans by Adams & Alsup, James Bldg., Chattanooga, Tenn.; contract price is exclusive of heating, plumbing and lighting.

Bald, Texas.—City contemplates erection of brick school building at cost of \$20,000. Address The Mayor.

Ballinger, Texas.—City will vote on bond issue for erection of \$25,000 school building. Address The Mayor.

Baltimore, Md.—Board of Awards will re-

ceive bids until March 3 at office of J. Sewell Thomas, City Register, City Hall, for erection of school building at Reisterstown road and Fifth avenue; bids must be on form of proposal at end of printed form of specifications, and must be attached; certified check for \$500 on some clearing-house bank, payable to the Mayor and City Council; drawings and specifications on file at office of Edward D. Preston, Inspector of Buildings, City Hall; J. Barry Mahool, Mayor; structure will be three stories; brick and stone; contain 24 classrooms; plans by Otto G. Simonson, American Bldg., Baltimore; contractors estimating include American Contracting Co., American Bldg.; David Peoples & Co., 213 N. Calvert St.; P. J. Cushing, Law Bldg.; Henry S. Rippel, 1-7 Clay St.; Milton C. Davis, 5 Hopkins Pl.; John Hiltz & Son, 3 Clay St.; Edward Waters & Co., 532 St. Paul St.; Fred Decker & Son, 1209 E. Biddle St.; D. M. Andrews Company, Vickers Bldg.; James F. Farley, Franklin Bldg.; Charles L. Stockhausen, National Marine Bank Bldg., and William Friese, all of Baltimore.

Binghamton, Okla.—City had plans prepared by J. J. Glanfield, Tulsa, Okla., for schoolhouse recently mentioned; eight rooms; two stories; stone; fireproof roof; mill construction; hot-water and steam heat; natural-gas lighting; cost \$27,000; date of opening bids not settled.

Brownwood, Texas.—City will receive bids until March 8 at offices of M. L. Waller, architect, Fort Worth, Texas, or of I. J. Rice, Brownwood, for erection of three-story brick and reinforced concrete school building at Brownwood; certified check for \$600; plans and specifications on file at above addresses. (Noted in December.)

Camden, Ark.—City will erect \$35,000 school building; E. H. Carson, Mayor.

Chattanooga, Tenn.—Hamilton County Board of Education (High School), W. S. Beck, chairman, 619 Walnut St., Chattanooga, and same board (Grammar School), J. A. Hargraves, Chattanooga, chairman, will proceed with plans for school buildings, State Legislature having authorized bond issue of \$150,000, recently mentioned; new grammar school will be built in Alton Park (suburb); 10-room-and-auditorium building in Soddy, Tenn.; \$50,000 of amount for high-school purposes; Hixson and Sale Creek buildings to be equipped; addition erected to Central High School at Ridgedale Station, Chattanooga.

Cleburne, Texas.—A. B. Barrett, Denton, Texas, is interested in establishment of Christian College at Cleburne; will erect structure two stories and basement; pressed brick, with stone trimmings; cost \$20,000; artesian well will be sunk on campus.

Coffeeville, Miss.—City contemplates bond issue of about \$10,000 for erection of school building recently reported to be rebuilt; no plans made; correspondence with architects desired by School Board. Address P. M. Woodall.

Davidson, N. C.—Davidson College, Dr. Henry L. Smith, president, has had plans prepared by Hook & Rogers, Charlotte, N. C., for dormitory building; 31 rooms; cost about \$15,000.

Eagle Pass, Texas.—City has ordered B. Stanley Brown, architect, Eagle Pass, to alter plans for proposed school building, to cost about \$30,000; new bids will be asked.

Elberton, Ga.—City has voted \$35,000 of bonds for erection of school building. Address The Mayor. (Recently mentioned.)

Fordyce, Ark.—Bids will be opened March 3 instead of February 24, as recently noted, for erection of two-story pressed-brick slate-roof school building at Fordyce; separate bids for plumbing and heating; certified check for \$1000 with bids for general contract, and for heating and plumbing; certified check for 5 per cent. amount of bid, both made payable to J. W. Coffield, secretary School Board, Fordyce; plans and specifications on file at office of secretary and of Charles L. Thompson, architect, Little Rock,

Ark.; C. B. Hickey, president of School Board, Fordyce. (See "Machinery Wanted.")

Front Royal, Va.—Eastern College will erect brick dormitory at approximate cost of \$18,000. Address Dean, Eastern College.

Front Royal, Va.—Trustees Front Royal Graded School will award contract in about 30 days for erection of school building recently noted; brick structure; steam heat; electric lighting; ventilators; cost \$22,000; plans by C. F. Linthicum, Durham, N. C.

Graymont, P. O. Birmingham, Ala.—City has voted \$10,000 of bonds for purchasing sites and erecting school buildings. Address The Mayor. (Recently noted.)

Holdenville, Okla.—City has voted \$35,000 of bonds for erection of school building. Address The Mayor. (Mentioned in December.)

Kinston, N. C.—City contemplates voting on \$75,000 bond issue for erection of school building, market-house, construction of municipal telephone system, extension of light, water and sewer systems and other public improvements. Address The Mayor.

Lawton, Okla.—City has voted \$100,000 of bonds for erection of high school building. Address The Mayor.

Marshall, N. C.—City will ask legislative permission to issue \$10,000 of bonds for erection of school building. Address The Mayor.

Midland, Texas.—Bids will be opened March 6 at Midland National Bank for erection of Midland College building; three stories and basement; brick and stone; certified check for \$400; plans and specifications on file at office of Walter E. Taylor, Continental Bank Bldg., Fort Worth, Texas, and at Midland National Bank, Midland.

Murphy, N. C.—City contemplates erection of \$10,000 school building; J. R. McLellan, secretary, School District No. 1, to be addressed.

Newnan, Ga.—City will vote on \$16,000 bond issue for erection of school building in South Newnan. Address The Mayor.

Opelousa, La.—City contemplates voting on issuance of special tax for erection of Central High School building. Address The Mayor.

Paragould, Ark.—City awarded contract to Southern Building Co., Louisville, Ky., for erection of \$25,000 school building.

Pontotoc, Miss.—City has voted bonds for erection of \$25,000 school building. Address The Mayor.

Paris, Texas.—Bids will be opened March 8 at office of O. B. McKnight, City Secretary, for erection of brick high-school building; plans and specifications on file at office of Barry & Smith, architects, Paris; three-story structure; Corinthian style; slow-combustion construction; steam heat; electric lighting; cost \$40,000.

Raleigh, N. C.—St. Mary's School awarded to Central Carolina Construction Co., Greensboro, N. C., to erect two wings to main central building and alter front and roof of main building; cost about \$35,000.

Richmond, Ky.—Board of Regents of Eastern Kentucky State Normal School awarded contract at \$97,000 to Combs Lumber Co., Lexington, Ky., for erection of power-house building, girls' dormitory and model school building, and to F. A. Clegg Company, Louisville, Ky., for power-house equipment, underground distributing system and heating apparatus. (Recently mentioned.)

Rison, Ark.—City contemplates erection of school building; has petitioned Legislature to grant privilege of issuing bonds; J. M. McMurry, Clerk of Courts.

San Angelo, Texas.—City will vote March 6 on \$32,000 bond issue for erection of two ward school buildings. Address The Mayor.

Soddy, Tenn.—Hamilton County Board of Education, J. A. Hargraves, Chattanooga, chairman, will erect 10-room-and-auditorium school building. (See Chattanooga.)

Talladega, Ala.—Alabama Synodical College, T. P. Walton, president, will erect college building, to cost about \$40,000.

Texarkana, Texas.—City has voted \$125,000 of bonds for erection of high-school building; purchase of site for same and improvements to ward school buildings; A. B. DeLoach, Mayor. (Recently mentioned.)

University, Station Charlottesville, Va.—Plans are not yet completed for University of Virginia building mentioned in November; lecture rooms, library, etc.; classic style building; 50x120 feet; ordinary construction; steam heat; electric lighting; cost \$65,000; J. K. Peebles, architect, Norfolk, Va.; F. A. Alderman, president, university.

Victoria, Texas.—City contemplates \$25,000 bond issue for school and streets; H. Higgins, clerk.

Wardville, Okla.—School District No. 1, Atoka county, will receive bids for erection

## MANUFACTURERS' RECORD.

of \$5000 native sandstone school building in Wardville; F. P. Reinking, treasurer.

Webb City, Mo.—Webb City School District voted \$30,000 bond issue for erection of high-school building; J. T. Aldridge, secretary board of school directors.

Westminster, S. C.—City has voted \$5000 of bonds for erection of annex to school building to be used as assembly hall; brick; seating capacity 800. Address The Mayor.

Whitwell, Tenn.—City will erect \$8000 school building after plans by R. H. Hunt, James Bldg., Chattanooga; frame structure; two stories and basement; bids to be received and contract awarded in Whitwell; J. J. Dykes, chairman building committee, Whitwell.

Winchester, Ky.—Midway Orphan School will erect new building, to cost \$30,000.

Yonkum, Texas.—City accepted plans by Phelps & Jacobs, San Antonio, Texas, for school building; two stories and basement; entrances on all four sides; cost about \$31,500. (Recently mentioned.)

## THEATERS

Baltimore, Md.—Theodore Doukas of Doukas & Surges, 933 Lexington Market, and George Konstant of George Konstant & Bros., 628 West Lexington St., have had plans prepared by E. Seckmann, 1808 North Chester St., Baltimore, for moving-picture theater at Francis street and Fulton avenue; one story; 28x50 feet; exterior of ornamental metal; slate roofing; foundation of heavy stone laid in cement; bids are being received.

Baltimore, Md.—Theatorium Company, Harry E. Jenkins (secretary Sparveta Mining Co., 37 Ingram Bldg.), general manager, will erect moving-picture theater on North avenue between Charles street and Lovegrove alley; structure to be one story high, with walls and foundations to provide for several additional stories; 39x15 feet; interior ornamental staff work; plans by Otto G. Simonson, American Bldg.; contract awarded to Henry Smith & Sons Company, 116-129 South Regester St., both of Baltimore.

Durham, N. C.—O. F. Wilkerson of Durham has contract to erect theater and business building; one story; front of white pressed brick; 79x110 feet; seating capacity, 476; seats to be elevated and patent folding.

Jasper, Ala.—The Crawford Company, Birmingham, Ala., is considering, it is reported, erection of opera-house.

Kansas City, Mo.—Columbia Amusement Co. leased two sites, one 62x135 feet and other 77x75 feet, on which to erect two-story theater, to cost about \$150,000; storerooms in front and theater in rear.

Lockhart, Texas.—Fire Department has not had plans prepared for opern-house and fire station recently mentioned. Address Jule T. Connally, Lockhart. (See "Municipal Buildings.")

Tampa, Fla.—C. D. Peruchi, proprietor of Peruchi-Gypsea Stock Co., has leased Iris Theater and will remodel.

## WAREHOUSES

Baltimore, Md.—State Tobacco Warehouse Building Commission awarded contract to John Waters, 23 E. Centre St., Baltimore, at \$218,614, for erection of State tobacco warehouse on Conway street; Baldwin & Pennington, 330 N. Charles St., Baltimore, are architects. (Recently mentioned.)

Cairo, W. Va.—H. E. McGregor & Co. will erect warehouse.

Dallas, Texas.—J. A. Hughes will erect warehouse; three stories and basement; 172x50 feet; floor space, 125,000 square feet; press brick; cost about \$100,000; contract awarded to Alexander Watson of Dallas.

Dallas, Texas.—R. E. Adams will organize company to erect warehouse.

Jacksonville, Fla.—Seaboard Air Line Railroad, W. L. Seddon, chief engineer, Portsmouth, Va., awarded contract to W. T. Hadlow Company of Jacksonville for erection of warehouse in which to store phosphate rock, salt, etc.; structure to be 300x84 feet; sides covered with galvanized iron; pile foundation; roof to be four-ply gravel; electric and gas lighting; overhead tramway will be constructed in interior of building for handling heavy freight; this tramway will be regular trackage of small steel rails and motive power will probably be either cable or electricity; trestle work will be constructed on each side of warehouse, upon which tracks are to be laid to afford transportation facilities; covered platforms, to extend entire length of warehouse, will be erected in connection with trackage; estimated cost \$40,000. (Recently mentioned in connection with company's plans for general improvements.) Receivers of Seaboard have offices at 401 Continental Trust Bldg., Baltimore, Md.

Jacksonville, Fla.—R. L. and J. L. Crigler, Covington, Ky., awarded contract to Hadlow & Co., Jacksonville, for erection of office and warehouse; three stories; brick; ordinary construction; city electric lighting; hand-power elevators; equipment for bottling liquor; estimated cost \$9000; plans by McClure & Holmes, architects, Jacksonville. (Recently mentioned under "Miscellaneous Structures.")

## RAILROAD CONSTRUCTION

## RAILWAYS

Aberdeen, N. C.—The Aberdeen & Asheboro Railroad has, it is reported, amended its charter to build an extension from Candor via Rockingham to the South Carolina boundary, presumably to connect with the Benettsville & Cheraw Railroad, in which Henry A. Page, president of the Aberdeen & Asheboro, is said to be interested. Mr. Page's address is Aberdeen, N. C.

Asheville, N. C.—An official of the Nashville & East Tennessee Railroad advises the Manufacturers' Record that the company has not yet organized permanently. Track is laid nearly to Weaverville, N. C. The proposed route is from Asheville, via New Bridge, Weaverville, Mars Hill, Paint Gap, Burnsville and Daybook to Hundale, N. C., on the Carolina, Clinchfield & Ohio Railway. R. S. Howland of Asheville is general manager.

Austin, Texas.—The City Council has granted an extension until May 19 to the promoters of the Austin-Lockhart Interurban Electric Railway to begin work. Thomas Moore, president of the Texas Interurban Company, and others are interested.

Baton Rouge, La.—Reported that plans are being considered for the construction of a railroad bridge across the Mississippi River by the Illinois Central and the Southern Pacific. A. S. Baldwin is chief engineer of the former at Chicago, Ill., and A. V. Kellogg is engineer in maintenance of way of the latter at Houston, Texas.

Bay Minette, Ala.—Reported that a movement is under way to build an electric railway from Daphne to South End along the shore of Mobile Bay, and W. S. Anderson of Mobile has been appointed chairman of a committee on the enterprise. Among others interested are E. Q. Norton of Daphne, J. B. Robertson of Sea Cliff and H. S. Greene of Fair Hope.

Beaumont, Texas.—Reported that the Texas & New Orleans Railway (Southern Pacific system) will build large yards at Beaumont. A. V. Kellogg is engineer in maintenance of way, at Houston, Texas.

Blountstown, Fla.—The Manufacturers' Record is informed that a railroad will soon be built into Blountstown. The Mayor may be able to give information.

Brewton, Ala.—Reported that the Cedar Creek Mill Co. will continue construction on its new railroad from Brewton to Andalusia, Ala., about 75 miles.

Brady, Texas.—Col. J. H. Ransom of San Angelo, Texas, is reported to have made a proposition to citizens of Brady for a railroad from Brady to Eden, Texas, 50 miles, the line to connect at San Angelo with the Kansas City, Mexico & Orient Railway and with the Houston & Texas Central at Llano, Texas.

Brownsville, Texas.—Concerning the report that the St. Louis, Brownsville & Mexico Railway Co. would soon build the proposed bridge across the Rio Grande near Brownsville, an official informs the Manufacturers' Record that the matter of bids was closed up a month or more ago, but it is not yet determined when work will proceed.

Burgess, Mo.—The Pittsburg & Kansas City Railway Co. has been incorporated with \$500,000 capital to build a line from Burgess, Mo., to Pittsburg, Kan., 50 miles. The incorporators include John W. Ground, Thomas K. Irwin, William M. Calhoun and Fred H. Fitch. Address: Burgess, via Liberal, Mo.

Cape Charles, Va.—Rumored that the New York, Philadelphia & Norfolk Railroad, which is double-tracking near Salisbury, Md., will continue that work until the entire line is double tracked from Delmar to Cape Charles. J. G. Rodgers is superintendent, Cape Charles, Va.

Centerville, Tenn.—The Nashville, Chattanooga & St. Louis Railway, it is reported, is surveying to revise grades and curves on the Centerville branch; also to build a line to Perryville. Hunter Macdonald is chief engineer at Nashville, Tenn.

Chattanooga, Tenn.—An officer of the Southern Railway, in a letter to the Manufacturers' Record, confirms report that work has been resumed on the double track from Clift-

on, near Chattanooga, to Ooltewah Junction, about 14 miles.

Crossville, Tenn.—The Tennessee Coal, Iron & Timber Co., which, according to a letter to the Manufacturers' Record, owns over 50,000 acres of mineral and timber lands in Cumberland and Morgan counties, proposes to build a short line of standard-gauge railroad to connect with the Southern Railway and the Queen & Crescent Route. An issue of \$200,000 of bonds is for building the railroad and other purposes connected with development. The directors are: President, Ex-Gov. Curtis Guild, Jr.; secretary, Percy G. Bolster; treasurer, Charles W. Whitecomb, all of Boston, Mass.; general counsel, W. A. Henderson of Washington, D. C.; Wilbur A. Libbey of Boston; Samuel W. McCall of Winchester, Mass., and Samuel Dixon of Macdonald, W. Va. The company has a Malme charter. Its capital is \$1,500,000, and the total authorized bond issue is \$500,000 of 6 per cent.

Dante, Va.—The Carolina, Clinchfield & Ohio Railway, it is reported, will soon request bids for 190 miles of new construction from Dante northward through Virginia and Kentucky, to connect with the Chesapeake & Ohio Railway. M. J. Caples is vice-president and chief engineer at Johnson City, Tenn.

Eastland, Texas.—Reported that the Eastland, Rising Star & Southern Railway Co. has let contract for clearing right of way and grading will begin as soon as that is completed. F. J. McDaniel of Dallas, Texas, is engineer. V. R. Coon, Detroit, Mich., and others are interested.

Elizabeth City, N. C.—Reported that a bill has been introduced in the Legislature to charter the Albemarle Railroad Co. for the proposed electric railway advocated by D. G. Wilson of Weeksly, N. C., from that place to Elizabeth City.

Flovilla, Ga.—The Flovilla & Indian Springs Railway, it is reported, is grading an extension of about 1½ miles to Bibb, on the Southern Railway. Robert V. Smith is general manager at Flovilla, Ga.

Fort Payne, Ala.—An officer of the Alabama Railway & Power Co. informs the Manufacturers' Record that it is expected to begin work on its proposed line this year to connect Birmingham and Chattanooga. This confirms a press report.

Graham, Texas.—Reported that the Rock Island has ordered construction to begin on the proposed extension from Graham to Stamford, Texas, heretofore reported. C. M. Case is chief engineer at Fort Worth, Texas. J. B. Berry of Chicago, chief engineer of the system, is quoted as saying that permanent survey is ordered and has begun.

Hinton, W. Va.—James I. McCreery of Hinton is reported as saying that he has secured a franchise for an electric railway from Hinton to Red Sulphur Springs and Union, W. Va. The first section is along New River and Indian Creek to Red Sulphur Springs, 20 miles, with a grade not over 20 feet to the mile.

Hopkinsville, Ky.—President L. W. Goode of the Cairo & Norfolk Railway Co., 111 Broadway, New York, writes the Manufacturers' Record that it is expected to resume construction in April or May at the Mississippi River end, and it is hoped to have the first two sections (a total of about 60 miles) completed in October or November, and the third section to Hopkinsville, Ky., by January next.

Houston, Texas.—H. T. Best, president and promoter of the proposed Houston & Port Arthur Short Line, is reported as saying that financing has about been arranged and that construction will begin perhaps within two or three months. This plan includes the grade of the Texas & Western Railroad.

Houston, Texas.—Reported that S. W. Fordyce and W. C. Fordyce of St. Louis and associates contemplate building a terminal railway at Houston. Harvey T. D. Wilson and Hubert S. H. Wilson of Houston are also said to be interested, besides A. N. Edwards and Thomas Randolph of St. Louis.

Houston, Texas.—Concerning the report that the Texas & New Orleans Railroad proposed improvements, an officer informs the Manufacturers' Record that no extensive work is contemplated at present.

Howe, Okla.—An officer of the Kansas City Southern Railroad is reported as saying that grading is completed between Howe and Heavener, Okla., on the cut-off, but that track laying and bridging are postponed. A. F. Rust is resident engineer, at Kansas City, Missouri.

Huttig, Ark.—An officer of the Louisiana & Pine Bluff Railway is quoted as saying that construction on the extension from Dollar Junction, Ark., to New London, 15 miles, and from New London to Wilmington, the same distance, has been stopped temporarily.

Jasper, Ala.—An officer of the Alabama Central Railroad informs the Manufacturers' Record that the extension contract recently let is for only a temporary log road.

Jacksonville, Fla.—The Seaboard Air Line is reported to have completed plans to remodel its freight yards in Jacksonville, at a cost of about \$25,000. This will include track reconstruction of a considerable amount. W. L. Seddon is chief engineer at Portsmouth, Virginia.

Kansas City, Mo.—The Kansas City, Olathe, Ottawa & Iola Railroad Co., it is reported, is surveying for a proposed line between Kansas City and points in Kansas. Hugh A. Holmes, New England Bldg., Kansas City, Mo., and others are interested.

Knoxville, Tenn.—An officer of the Knoxville, Sevierville & Eastern Railway Co. writes the Manufacturers' Record confirming the report that construction has been resumed and saying that eight miles are now covered with outlays and the remainder of the 29-mile line from Knoxville to Sevierville will be covered immediately. The contractor is the Revilo Construction Co. of Knoxville, line expected to be operating this distance by January 1 next. C. S. McManus is president and W. A. Seymour, chief engineer, at Knoxville, Tenn.

La Porte, Texas.—Reported that \$50,000 have been subscribed by residents of La Porte for an interurban electric railway from La Porte to Houston, Texas, via Harrisburg, Pasadena and Strang; also, from La Porte via Sylvan Beach to Red Bluff and Seabrook. John Beasley, A. M. McKay and A. O. Buckwell are said to be interested.

Marshall, Texas.—Citizens of Marshall are reported to have raised the \$25,000 bonus to secure the extension of the Marshall & East Texas Railroad about 20 miles south to Polkton county. The company, it is reported, has already spent about \$100,000 for betterments on the old line from Marshall north to Winnboro, Texas, 7½ miles. On this old road some grade and curve reductions are expected. On the Southern extension maximum grades are five-tenths of 1 per cent, and maximum curvature about 4 degrees. Albert T. Perkins, 401 Locust St., St. Louis, Mo., is president, and J. E. Votaw is general superintendent, at Marshall, Texas.

Mechanicsville, Md.—The Washington, Potomac & Chesapeake Railroad, it is said, will sell \$200,000 of 6 per cent, preferred stock to extend its line from Mechanicsville to Esperanza, Md., about 20 miles. Henry W. Watson, 305 Girard Trust Bldg., Philadelphia, Pa., is president.

Memphis, Tenn.—Reported that ground has been broken for the new union passenger terminal, which will be used by all the lines entering Memphis. Albert W. Biggs is president of the Terminal Company and W. H. Harrison chief engineer.

Memphis, Tenn.—John B. Wheeler, representing Eastern capital, is reported arrived at Memphis to secure rights of way for the proposed electric railway from Memphis via Brownsville and Humboldt to Jackson, Tenn.

Meridian, Miss.—Charles F. Scofield of New York city, secretary of the Mississippi River & Western Railroad, is reported as saying that the company expects to begin construction in 90 days, starting work on the western end between Natchez and Hazlehurst, Miss., 80 miles. It is about 110 miles from Hazlehurst to Meridian, Miss., the eastern terminus.

Morgantown, W. Va.—W. E. Hildebrand, according to a report from Pittsburgh, proposes to build an electric railway, to be called the Pittsburg, Morgantown & Grafton, from Washington, Pa., to Marietta and Waynesboro, Pa., Morgantown and Grafton, W. Va. James Bryan will, it is reported, make the survey. E. M. Grant of Morgantown and others are mentioned as being interested.

Mount Pleasant, Texas.—J. D. Trammell, chief engineer for the Paris & Mount Pleasant Railroad Co., is reported to be making preliminary survey to connect the points named about 50 miles. R. F. Scott of Paris, Texas, is president.

Nashville, Ark.—The Memphis, Paris & Gulf Railway Co., according to a report quoting H. L. Rennel, contemplates building an extension to either Malvern and Little Rock or to Hot Springs. An extension to Murfreesboro is now under way. C. C. Henderson is vice-president and general manager at Nashville, Ark.

Onalaska, Texas.—The Beaumont & Great Northern Railroad, it is reported, has decided to immediately extend from Livingston to Beaumont, 65 miles. T. H. Clement is chief engineer at Onalaska, Texas.

Orange, Texas.—Reported that the Miller-Link Lumber Co. will build a tramroad

seven miles long from its mill at Newton, Texas.

Paris, Ark.—Henry Stroup, contractor, is reported as saying that grading is nearly completed on the railroad from Paris to Sulphur, six miles, and that he will begin laying track about March 1.

Paris, Ark.—The Arkansas Central Railroad is reported to have completed location survey for an extension from Paris to the new town of Scranton for handling the output of an anthracite coal field. J. H. Wright is president, at Fort Smith, Ark.

Pawhuska, Okla.—The Oklahoma & Golden City Railroad Co., which proposes to build a line in Missouri and Oklahoma, as heretofore reported, has authorized capital of \$12,000,000. The following officers have been elected: E. M. Dempsey of Pawhuska, Okla., president; J. A. Wimberly, also of Pawhuska, and L. C. Lohman of Jefferson City, Mo., vice-presidents; W. H. Reed, secretary; W. B. Burns, treasurer, both of Golden City, Mo.; W. S. Hawking of Pawhuska, Okla., chief engineer; E. E. Grinstead of the same place, general attorney, and J. A. Griesel of Golden City, Mo., general manager. Line will connect Jefferson City, Climax Springs, Golden City, Carthage and Joplin, Mo.; Pawhuska, Bartlesville and Miami, Okla., and other points.

Richwood, W. Va.—H. M. Curril, superintendent of the Richwood and Glenray Railroad Co., is reported as saying that grading is in progress on the line to be built from Richwood to Glenray, 30 miles.

Salisbury, Md.—President M. V. Brewington of the Wicomico Electric & Power Co., Salisbury, Md., writes the Manufacturers' Record that the company has a legislative charter to build a railroad from Nanticoke Point to Willard, all in Wicomico county, Maryland, 35 miles, with branches of 15 miles each; capital \$200,000. Bonds will be issued up to \$15,000 per mile. Construction is to begin immediately or as soon as financing can be arranged. Engineers have inspected the route. The other officers are L. W. Dorman, vice-president; H. James Messick, second vice-president; Jesse D. Price, general manager; William M. Cooper, treasurer; Mark Cooper, secretary.

San Antonio, Texas.—J. F. Edwards, who proposed to build a railroad from San Antonio southward toward Brownsville, is reported to have given up the plan after a final inspection of the route, and the Business Men's Club of San Antonio will, it is said, hold open the bonus of \$105,000 for anyone who will construct the line.

Sapulpa, Okla.—An official letter to the Manufacturers' Record says that the Sapulpa & Interurban Railway Co. proposes to build from Sapulpa to Glenpool, on the Midland Valley Railroad, 10 miles, via Kiefer. In addition to this, five miles will be built at Sapulpa and in that vicinity; also, another line three miles northeast to a new oil field at Tanneha. H. E. Clark of Glen Campbell, Pa., is president; B. B. Burnett of Sapulpa, Okla., vice-president; H. H. McFann, general manager; Dan W. Patton, also at Sapulpa, chief engineer. Contracts will be let for grading, bridges and culverts, but the company will erect overhead work. Maximum grade, 2 per cent.; maximum curvature, 10 degrees.

Smithville, Texas.—The Missouri, Kansas & Texas Railway, it is reported, will spend \$450,000 for improvements on its South Texas division. J. W. Petheram is chief engineer at Dallas, Texas.

Springfield, Mo.—Survey is reported completed for the Springfield Traction Co.'s line from Springfield to Carthage, Mo., and it is expected that construction will begin in the spring.

Stamford, Texas.—D. B. Keeler, vice-president of the Fort Worth & Denver City Railway, is reported as saying that track-laying has begun and grading is progressing rapidly on the first 75 miles.

St. Louis, Mo.—An official of the Missouri Pacific system is reported as saying that contracts for \$250,000 of work have been awarded to the L. J. Smith Construction Co. of Kansas City. This includes ballasting on the Memphis, the Natchez and the Valley divisions and bridge filling on the Memphis division.

Stephenville, Texas.—President B. C. Cage of the Stephenville, North & South Texas Railway, writes the Manufacturers' Record that a one-half interest in the road has been sold. This refers to a report in the Manufacturers' Record February 18 that a St. Louis syndicate had bought a half interest. Continuing, President Cage says it is proposed to extend south from Hamilton via a connection with the Santa Fe to San Antonio, but neither the route nor the date of beginning construction has yet been decided.

Sylvester, Ga.—Reported that the Gulf Line Railway has made a survey from Hawkinsville, which will be continued to Camilla, Ga. G. F. Alford is president at Sylvester, Ga.

Taylor, Texas.—The International & Great Northern Railroad is reported surveying for switching yards at Taylor. O. H. Crittenden is chief engineer at Palestine, Texas.

Thomasville, N. C.—The Piedmont Railway Co. is reported organized with \$500,000 capital to take over the Carolina Valley Railroad from Thomasville to Denton and to extend it into a timber region. Milton L. Jones of Thomasville is president; Thomas J. Jerome of Salisbury, N. C., vice-president, and J. L. Armfield, secretary and treasurer. The directors include F. S. Lambeth, J. W. Lambeth, Dr. Mock, A. E. Carl, D. Jones and J. B. Jones.

Vade Mecum, N. C.—Dr. H. P. MacKnight, chief engineer of the Crescent Electric Railway, Vade Mecum, N. C., and Southern Pines, N. C., is reported as saying that construction contracts will be let in March for the proposed line from Winston-Salem, N. C., to Stuart, Va., 69 miles. E. Hillman of Aberdeen, N. C., is president.

Victoria, Texas.—W. S. Hipp of Houston, Texas, is reported as saying that he still has the contract to build the Port O'Connor, Rio Grande & Northern Railroad, which, it was reported, was recently financed and had let a contract to another man. He expects that construction will be ordered resumed within 30 days.

Winchester, Va.—President S. H. Hanchett of the Winchester & Washington City Railway Co. informs the Manufacturers' Record that the franchise sought, according to recent report, is for poles and wires to Shenandoah Junction, Kearneysville and Martinsburg, W. Va., for electric current, and not for a railroad.

Wichita Falls, Texas.—The Wichita Falls & Southern Railway, it is reported, will build its contemplated extension to Llano, Texas, and has registered \$700,000 of bonds. R. A. Thompson is chief engineer at Wichita Falls, Texas.

Wichita Falls, Texas.—J. A. Kemp and Frank Kell are reported to have purchased the Wichita Falls Water & Light Co. and will build their proposed electric railway from Wichita Falls to Lake Wichita, five miles south.

Winston-Salem, N. C.—A director of the South Bound Railroad Co. is quoted as saying that it is hoped to resume construction work in March. H. E. Fries is president; W. T. Brown, vice-president; W. F. Shaffner, secretary-treasurer.

#### STREET RAILWAYS

Corpus Christi, Texas.—M. Ucovitch of Corpus Christi has applied for an electric street railway franchise. W. B. Tuttle, general manager of the San Antonio Traction Co., is also reported to be interested.

Hopkinsville, Ky.—Stockholders of the City Light Co. are reported to contemplate building a street railway. E. K. Dewey is vice-president and general manager.

Houston, Texas.—The Houston Electric Co. has been granted a franchise and proposes to build an extension from Ashland and Nineteenth streets. David Daly is manager.

Huntsville, Ala.—E. L. Pulley, general manager of the Huntsville Railway, is reported as saying that construction of the proposed line to Monte Sano may begin about March 1.

Laurel, Miss.—Mayor A. W. Noble informs the Manufacturers' Record that Laurel is anxious to grant a street-car franchise.

Selma, Ala.—The Selma Street & Suburban Railway is reported sold to the American Pipe Manufacturing Co. of Philadelphia, which controls the Selma Lighting Co., and it is expected that improvements will be made. New officers are reported elected thus: Joseph F. Keane, Jr., president and treasurer; George M. Bunting, vice-president; H. B. Hodge, secretary; James H. Dardes, general manager, all at Philadelphia, Pa. R. L. Ellis, superintendent of the Selma Lighting Co., will, it is said, temporarily act as general manager. C. S. Shuford is superintendent of the line.

#### Public Auditor and Accountant.

Public auditing and accounting is a profession that is proving invaluable to both public and private manufacturing, financial and other business enterprises. Among the Southern accountants who offer their services is Fred E. Rankin of Jacksonville, Fla. He has had 25 years' experience in accounting and is familiar with business conditions in the South, to many of whose leading men he can refer as to his qualifications as an auditor, accountant, confidential examiner, etc.

#### MACHINERY, PROPOSALS AND SUPPLIES WANTED

**Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery that is wanted.**

Air-brake Equipment.—Peacock's Iron Works, Selma, Ala., wants air-brake equipment for air brakes on 20 small flat cars; 20-ton capacity; eight wheels.

Bagging.—B. A. Meador, 122 Scott St., Little Rock, Ark., wants bagging for wrapping cotton bales.

Ball and Roller Bearings.—Williams Patent Crusher & Pulverizer Co., 2701 North Broadway, St. Louis, Mo., wants addresses of manufacturers of ball and roller bearings for general transmission machinery.

Belting.—J. L. Tate, Littleton, N. C., wants prices on best leather belting.

Boiler.—A. J. Dossett, Cameron, Texas, wants 40-horse-power boiler.

Boiler.—Break-o'-Day Canning Co., J. V. Moore, president, Mt. Pleasant, Texas, wants prices on 60-horse-power boiler.

Boiler.—American Metallic Packing Co., Walnut and Clark Sts., Lexington, Ky., wants new or second-hand 125-pound high-pressure horizontal 16-foot by 60-inch 30-horse-power tubular boiler, with all fittings and fixtures; if second-hand must be free of defects and pass Hartford inspection; state best cash price and full description.

Boilers.—J. L. Tate, Littleton, N. C., wants prices on stationary boilers.

Boilers.—See "Water-works Supplies."

Boilers.—D. D. Armstrong, 110 Candler Bldg., Atlanta, Ga., wants prices on boilers.

Bottles.—L. M. Vakil & Co., 3573 near Old Bombay Bank, Ahmedabad, India, wants samples, prices, etc., on glass bottles.

Bottling Machinery.—B. F. Donovan, Clifton Forge, Va., wants bottling machinery.

Bottling Machinery.—See "Filling and Corking Machinery."

Brick.—Miles & Puckett, Opelika, Ala., want 256,000 average brick. Quote delivered prices.

Bridge Construction.—Police Jury of Catahoula parish, H. W. Bethard, clerk, Harrisonburg, La., will receive bids until April 5 for construction of steel bridge for Bushley Bayou near Harrisonburg and for repair of steel bridge at Jonesville, La. Address bids to President of Police Jury. Address Mr. Bethard for information.

Broom Machinery, etc.—W. W. Durden, Camden, Ark., wants information relative to broom manufacture—cost of broomcorn; what machinery is needed and cost; what skilled labor required, etc.

Building Materials.—J. R. Randolph, Ruston, La., in market for large limestone columns, Fayetteville and Bedford stone, steel ceiling, Tennessee marble, oak wainscoting, terra-cotta capitals for stone columns, encaustic clay tile for floor, plate glass, galvanized-iron cornices, concrete reinforcing twisted bars, oak finish, and expanded metal lath.

Buckles and Metal Parts.—Dr. P. C. Jenkins, Roxobel, N. C., wants to correspond with manufacturers of metal parts for suspenders, armlets, suspensory bandages, trusses, etc.

Building Materials.—Robert E. Lisenbmidt, 130 Person St., Fayetteville, N. C., wants catalogues and price-lists of building materials interesting to architects and superintendents.

Building Supplies.—Contractors' Supply Co., First National Bank Bldg., Vicksburg, Miss., wants catalogues and prices on building and contractors' supplies.

Ceiling.—See "Flooring and Ceiling."

Canneries—H. G. Burnet, superintendent El Cajon Fruit Co., Paso Real, Cuba, wants names of manufacturers of canning plants; pines a specialty.

Canning Machinery.—Break-o'-Day Canning Co., J. V. Moore, president, Mt. Pleasant, Texas, wants prices on Hawkins canner, Triumph tomato scalding and three process kettles.

Canning Machinery.—A. J. Dossett, Cameron, Texas, wants prices on canning machinery; daily capacity, 10,000 two-pound cans.

Canning Machinery.—P. D. de Pool, Obispo Num. 1, Havana, Cuba, wants information and prices on canning machinery for tomatoes and ketchup.

Cement.—Miles & Puckett, Opelika, Ala., want 130 barrels standard or equal cement; quote delivered prices.

Cement-brick Machinery.—H. B. Austin, Florence, Ala., wants prices on cement-brick machine.

Cement Mixers, etc.—R. B. Monteith, superintendent Natchez, Compress & Warehouse Co., Natchez, Miss., wants catalogues of cement mixers and other cement machinery.

Comfort Machinery.—Commercial Club, Brownwood, Texas, wants comfort machinery.

Concrete-block Machinery.—J. T. Cash, Cherokee, S. C., wants addresses of concrete-block machine manufacturers.

Concrete-block Machinery.—H. B. Austin, Florence, Ala., wants prices on concrete-block machine.

Concrete Mixers.—Boston-Schub Construction Co., W. A. Shafer, president, Motor Mart, Boston, Mass., will be in market for concrete mixers.

Concrete Sidewalks.—Sealed proposals will be received at office of treasurer Southern Branch N. H. D. V. S., National Soldiers' Home, Virginia, until March 12 for labor and material for 3465 square yards concrete sidewalks, in accordance with instructions and specifications, copies of which, with blank proposals and other information, may be had upon application to John T. Hume, treasurer.

Cones and Tubes.—Anderson Machine & Foundry Co., Anderson, S. C., wants addresses of manufacturers of paper cones and tubes for yarns.

Contractors' Supplies.—See "Building Supplies."

Cotton Machinery.—B. C. Powell, Villa Rica, Ga., wants addresses of manufacturers of machinery for making shoestrings.

Crane.—A. C. Torbert & Co., 547 Monadnock Block, Chicago, Ill., in market for locomotive crane; 10 to 20 tons; send full details.

Crematory.—Board of Public Works, City Bldg., Forsythe and Ocean Sts., Jacksonville, Fla., will receive bids until March 2 for two separate proposals, one for complete garbage and refuse disposal plant of 40 tons and one for plant of 50 tons; certified check for \$500, payable to N. C. Wamboldt, chairman of the Board of Public Works; Philip Prioletti, City Engineer.

Crushed Stone.—General Contract Co., P. O. Box 630, New Orleans, La., wants prices on four cars of about 25 cubic yards each of crushed stone for concrete.

Crushing Machinery.—W. C. Gunby, Marion Station, Md., wants machine for grinding aster shells.

Crushing Machinery.—Spencer S. Marsh, care of Northern Hotel, Chattanooga, Tenn., wants names and addresses of manufacturers of machinery for reducing or crushing iron ore to powder.

Cypress or Juniper Poles.—Carolina Electrical Co., 110 Fayetteville St., Raleigh, N. C., wants prices on 6-inch by 25-foot and 7-inch by 30-foot cypress or juniper poles, in carload lots, from Eastern Carolinas.

Derrick.—Kirwan-Robins Supply Co., 409 Exchange Pl., Baltimore, Md., in market for guy derrick with 50-foot boom and bullwheel; state location, price, condition and make of fittings.

Drain-tile Machinery.—W. F. Edwards, Lemon Springs, N. C., wants information relative to manufacture of clay or concrete drain tile and prices on machinery.

Dredging.—Sealed proposals will be received at Bureau of Yards and Docks, Navy Department, Washington, D. C., until March 13 for certain dredging and wharf work at Navy-yard Norfolk, Va. Plans and specifications can be obtained on application to bureau or to commandant of the Navy-yard named; R. C. Holliday, chief of bureau.

Elastic Webbing.—Dr. P. C. Jenkins, Roxobel, N. C., wants to correspond with manufacturers of elastic webbing for suspenders, garters, etc.

Electric Generator.—Carolina Electrical Co., 110 Fayetteville St., Raleigh, N. C., wants prices on 3½-kilowatt 110-volt second-hand generator.

Electric Drills.—Peacock's Iron Works, Selma, Ala., wants electric drills for drilling holes in wood and iron for alternating current, 220 volts, three-phase, 60-cycle.

**Electric Lighting.**—A. H. Washburn, chairman Light Committee, Board of Public Service, City Hall, Charlotte, N. C., will receive bids until March 15 for lighting streets and other public places with electricity for five years from August 15; to be not less than 250 arc lamps, and possibly 325 or more; power of each lamp to be not less than 6.6 amperes and 70 volts at arc; power of lamps to be as great in lighting capacity as those of any other system now in use, consuming 462 watts energy; successful bidder to erect and maintain all poles, wires, lamps and other apparatus. Further information furnished by Light Committee.

**Electric Machinery.**—Jno. H. Bolinger, 415 Alabama St., Selma, Ala., will want electric lighting equipment.

**Electric Motor.**—Lee Ice & Fuel Co., Sanford, N. C., wants prices on 10-horse-power electric motor.

**Electric Motors.**—J. C. Steele & Sons, Statesville, N. C., want two second-hand motors—one 15 to 20 horse-power, one 20 to 40 horse-power; both 60-cycle, 220-volt, three-phase.

**Electric Motors.**—American Oak Leather Co., New Decatur, Ala., in market for 110 to 125-volt direct-current generator and motors—one 100 to 200-kilowatt generator, belt-ed; four 30-horse-power motors, 500 to 600 R. P. M.; one 70 to 75-horse-power motor, 500 to 700 R. P. M.; one 75 to 80-horse-power motor, 500 to 700 R. P. M.; prices on new or second-hand; full description, including weight and rate of freight.

**Electrical Equipment.**—Parker Manufacturing Co., Inc., Suffolk, Va., wants prices on electrical equipment for factory.

**Electrical Equipment.**—Blue Ribbon Creamery & Ice Cream Co., Shawnee, Okla., wants prices on electrical machinery.

**Engine.**—Break-o'-Day Canning Co., J. V. Moore, president, Mt. Pleasant, Texas, wants prices on 15-horse-power engine.

**Engine.**—See "Gasoline Engine."

**Engine.**—See "Gasoline Engine."

**Engine.**—Board of Fire and Water Commissioners, City Hall, Kansas City, Mo., will receive bids until March 11 for construction, delivery and erection of vertical, crank and flywheel engine, directly connected to centrifugal pump, upon foundation provided by city, in present building at Quindaro Pumping Station, Quindaro, Kans.; engine to have sufficient power and capacity to pump water continuously at rate of 25,000,000 U. S. gallons in 24 hours from Missouri River at low stage of one to four feet above Kansas City datum into settling basin at Quindaro, Kans., against head equal to 90 feet above Kansas City datum, measured on force mains at pump, with steam pressure of 150 pounds per square inch; plans and specifications on file in office of Water Department, Kansas City, Mo.; bidders to state price in aggregate for doing all work mentioned; proposals to be made on blank form furnished by Board of Fire and Water Commissioners; each bid to be accompanied by plans and specifications sufficient in detail to distinctly describe and show pumping engine proposed to be used, etc.; cash or certified check for \$2000.

**Engine.**—A. J. Dossett, Cameron, Texas, wants 15-horse-power engine.

**Engines.**—D. D. Armstrong, 1110 Candler Bldg., Atlanta, Ga., wants prices on engines.

**Ensilage Cutter.**—See "Silos, etc."

**Extract Machinery.**—J. O. Booton, Marshallville, Ga., wants information relative to manufacturing of concentrated fruit juices (peaches); also wants prices on machinery.

**Filling and Corking Machinery.**—D. R. Yarbrough & Co., Johnson City, Tenn., want machinery to fill, cork and label panel bottles,  $\frac{1}{2}$  to 2 oz.

**Fire-brick.**—Wild Bros. Hardware Co., Evergreen Ala., want addresses of manufacturers of fire-brick.

**Floor Coatings.**—See "Paints."

**Flooring.**—Sayre & Baldwin, Payne Bldg., Anderson, S. C., want to correspond with manufacturers of maple, oak and other hardwood flooring.

**Flooring and Ceiling.**—Thos. K. Colgate, R. F. D. No. 6, Rome, Ga., wants addresses of manufacturers of fireproof flooring and ceiling.

**Gas-lighting Apparatus.**—Bids will be received at office of Judge of Probate of Mobile County, Mobile, Ala., until March 1 for installation of gas-lighting apparatus in building for poor at Mobile County Asylum; detailed information may be had at office of Rudolph Ben & Sons, architects, Masonic Temple, Mobile; John T. Bauer, president Board of Revenue and Road Commissioners Mobile county.

**Gasoline Engine.**—R. McCoy, Riverton, Va., in market for 3-horse-power gasoline engine.

**Gasoline Engine.**—Ice & Fuel Co., Sanford, N. C., wants prices on gasoline engine.

**Gasoline-lighting Plants.**—Georgia Lighting Co., A. J. Smith, manager, 456 Second St., Macon, Ga., wants prices on supplies for all kinds of gasoline-lighting plants.

**Glass.**—L. E. Alford, pastor M. E. Church South, Long Beach, Miss., wants prices on glass for church windows.

**Glove Machinery.**—E. L. McCord, Waller, Texas, wants to correspond with manufacturers of canvas glove machinery.

**Glove Machinery.**—Mountain Products Co., Middlesboro, Ky. (not Tenn., as recently printed), wants prices on new and second hand machinery for making cloth and leather gloves.

**Heating Apparatus.**—Bids will be opened March 3, instead of February 24 as recently noted, for heating and plumbing in school building at Fordyce, Ark.; certified check for 5 per cent. amount of bid, payable to J. W. Coffield, secretary Board of Education, Fordyce; plans and specifications on file at office of secretary or of Charles L. Thompson, architect, Little Rock, Ark. (See "Schools.")

**Heating Apparatus.**—Bids will be opened March 10 for heating and ventilating new high-school building at Wheeling, W. Va.; plans and specifications on file at Builders' Exchange, Chicago, Ill.; Pittsburgh, Pa.; New York city, and Cincinnati, Ohio, and at office of Geisley & Farris, architects, Wheeling.

**Hoisting Engine.**—Norfolk Hardwood Co., Law Bldg., Norfolk, Va., in market for skeleton 7x10 single-drum hoisting engine, with a screw friction.

**Hoisting Engine.**—Kirwan-Robards Supply Co., 409 Exchange Pl., Baltimore, Md., in market for three-drum hoisting engine, with boiler and swinging gear; state price, condition and location in first letter.

**Hydraulic Rams.**—Jones & Co., East Main and Water Sts., Norfolk, Va., want prices (dealers') on hydraulic rams for farm and residence.

**Ice Machinery, etc.**—Ice & Cold Storage Co., Biscoe, N. C., wants dealers' prices on ice machinery, tools, etc., and refrigerators.

**Ice Machinery.**—S. J. Leaphart, Lexington, S. C., wants small ice plant; non-ammonia preferred.

**Ice-making Plant.**—D. D. Armstrong, 1110 Candler Bldg., Atlanta, Ga., wants prices on small ice-making plant, to furnish town of 2000.

**Ice Plant.**—B. F. Donovan, Clifton Forge, Va., wants ice plant.

**Ice Plant.**—Harry B. Redding, Dayton, Pa., wants second-hand ice plant; capacity 6 tons 24 hours.

**Knitting Machinery.**—Commercial Club, Brownwood, Texas, wants catalogues and prices on knitting machinery.

**Knitting Machinery.**—B. C. Powell, Villa Rica, Ga., wants addresses of manufacturers of knitting machinery.

**Levee Construction.**—Board of Commissioners, Atchafalaya Basin Levee district (V. M. LeFebvre, president and A. V. Dubroca, secretary), Port Allen, La., will receive bids at office of Board of State Engineers, 402 Cotton Exchange Bldg., New Orleans, La., until February 25 for enlargement of Hickey Lee, West Baton Rouge Parish, Mississippi River, right bank; contents about 50,000 cubic yards; deposit \$200; cash or certified check to amount of proposal; other information as to location, character of work, blank proposal forms, etc., may be had on application to Board of State Engineers, New Orleans; to Mr. Lefebvre or Mr. Dubroca.

**Lime.**—Miles & Puckett, Opelika, Ala., want 450 barrels lime in bulk. Quote delivered prices.

**Lime Machinery.**—See "Pushing Machinery."

**Machinery.**—Milton W. Arrowood, 71 S. Pryor St., Atlanta, Ga., invites correspondence from builders of machinery wanting representation; engines, power equipment, steam specialties, mill and shop machinery, water-works equipment, etc.

**Machine Tools, etc.**—A. Bowles, Elkhorn, Va., wants prices on machine tools and supplies for repair shop; new or second-hand.

**Meter Boxes.**—W. E. Scarbor, Hartsville, S. C., wants 125 meter boxes; cast iron; both meter and curb valve.

**Metal Cases, etc.**—Baltimore (Md.) Board of Awards will receive bids at office of J. Sewell Thomas, City Register, until March 3 for furnishing and erecting metal cases, furniture, trucks and partitions in vault in south court of City Hall; certified check

\$500; drawings and specifications at office of Edward D. Preston, City Hall, Building Inspector.

**Metal Lath.**—See "Building Materials."

**Metal Slides.**—Frank Wright, Cave Springs, Ga., wants to correspond with manufacturers of metal slides for window screens.

**Novelty Manufacturers.**—J. R. Munroe, Lanesville, La., wants addresses of manufacturers prepared to make tin, wood or paper fac-similes of typewriter keyboards.

**Paints.**—Henry Loeb & Co., Memphis, Tenn., want mineral paint, asphalt or other material to cover washroom floor; this floor is covered with concrete and has cracked from vibration; over it runs water at temperatures as high as 180 degrees.

**Paving.**—City of Paris, Texas, O. B. McKnight, secretary, will award contract on March 22 for paving amounting to \$15,000 to \$25,000.

**Paving.**—Bids will be received at office of J. B. Winslett, City Secretary, Dallas, Texas, until March 5 for paving North Ervey street between Bryan street and Ross avenue; each bidder to bid separately on following materials: Bitulithic pavement on concrete foundation; bitulithic pavement on bituminous foundation; concrete curb; concrete gutter; vitrified brick; vitrified paving blocks; combination concrete curb and gutter; cash deposit of \$500 required with each bid; specifications on file with Mr. Winslett.

**Paving.**—Street and Alley Committee (Thomas W. Koon, George C. Young and Phil Smith), Cumberland, Md., will receive bids until March 1 for grading and paving North Lee street; street is 40 feet wide between building lines and 24 feet between curbs; about 775 feet long; has grade of 7 $\frac{1}{4}$  per cent. for three-quarters of length; paving to be of Hillside brick; curbs of concrete, and driveway of brick paving, part sand filler and part cement filler; estimated cost \$5070. Leander Schaidt, City Engineer, will be in charge.

**Piling.**—W. J. McGee, 110% President St., Jackson, Miss., wants names and addresses of manufacturers of piling for lighthouse foundations.

**Piping.**—City of Florence, Ala., will advertise soon for bids on about 852 feet storm sewer 21-inch clay pipe. L. O. Scruggs, City Engineer.

**Piping.**—Sealed proposals will be received at office of Treasurer, Southern Branch, N. H. D. V. S., National Soldiers' Home, Va., until March 20 for labor and material for drain piping, placing metal railing on seawall and for painting interior of buildings Nos. 14, 41, 42, 44 and 49, in accordance with instructions and specifications, copies of which, with blank proposals and other information, may be had upon application to John T. Hume, Treasurer.

**Plaster Board.**—W. P. Wright, 116 Webb St., Anderson, S. C., wants prices on (Sack) plaster board, f. o. b. Anderson.

**Plaster.**—Miles & Puckett, Opelika, Ala., want 7 $\frac{1}{2}$  tons hard wall plaster; quote delivered prices.

**Plate Glass.**—See "Building Materials."

**Plumbing.**—See "Heating Apparatus."

**Portable Houses.**—Eugenio Blanchini, The Breslin, Broadway and 29th St., New York, wants agency for portable houses.

**Printing Plant.**—Retail Merchants' Association, Andrews, N. C., wants to lease, with privilege of buying at end of twelve months, equipment to print seven-column four-page newspaper.

**Pumps.**—See "Water-works Supplies."

**Rails.**—W. A. Seymour, chief engineer, Knoxville, Sevierville & Eastern Railway, Knoxville, Tenn., invites quotations on rails, etc., for railway construction; probably 30 miles construction this year.

**Rails, etc.**—Texas Short Line Railroad, P. H. Hesmecker, secretary, San Antonio, Texas, in market for new and second-hand steel rails and other railroad supplies.

**Refrigerating Machinery.**—Industrial Stock Farming Co., Ridgeville, S. C., wants prices on small cold-storage plant.

**Refrigerating Machinery.**—Blue Ribbon Creamery & Ice Cream Co., Shawnee, Okla., wants prices on chemical refrigerating machinery.

**Refrigerators.**—See "Ice Machinery, etc."

**Reinforcing Bars.**—See "Building Materials."

**Reinforcing Steel.**—Boston-Schub Construction Co., W. A. Shafer, president, Motor Mart, Boston, Mass., will be in market for reinforcing steel, etc., for building construction.

**Roller Partitions.**—Julian S. Starr, Rock Hill, S. C., wants to correspond with manufacturers of roller partitions for churches and halls.

**Roller Skates.**—Universal Motor Imports, 10 Wilmington Sq., Rosebery Ave., London, W. C., England, wants to represent American manufacturers of ball-bearing roller skates.

**Roofing.**—Otis Capelin, Batesville, Ark., wants prices on about 60 squares of slate roofing.

**Roofing.**—W. J. Snend Lumber Co., Greenwood, S. C., wants bids on slate roofing or composition roofing with gravel covering.

**Sawmill.**—D. D. Armstrong, 1110 Candler Bldg., Atlanta, Ga., wants prices on saw-mill to cut about 10,000 or 15,000 feet daily.

**Screen Doors and Window Screens.**—W. W. Poole, Hawkinsville, Ga., wants prices on screen doors and window screens.

**Seating.**—W. G. Glover, Elizabeth City, N. C., wants prices on 800 to 1000 chairs for school building.

**Sewer Construction.**—Commissioners of Sewerage (W. C. Nones, chairman; Charles P. Weaver, secretary-treasurer), Equitable Bldg., Louisville, Ky., will receive bids until March 5 for construction of Section "B" of Castlewood Sewer, Contract No. 26, of comprehensive system of sewerage; work will consist mainly of building concrete sewer about 2700 feet long, size 36 to 42 inches, depth 9 to 18 feet, and including about 675 cubic yards of concrete; plans and specifications at office of Commissioners and of Harrison P. Eddy, consulting engineer, 14 Beacon St., Boston, Mass.; certified check for 7 per cent. of amount of bid; J. B. F. Breed, chief engineer.

**Sewing Machines.**—Easton Shirt Manufacturing Co., Robert B. Dixon, president, Easton, Md., will want 40 to 100 sewing machines. (See "Miscellaneous Manufacturing Plants.")

**Silos.**—Industrial Stock Farming Co., Ridgeville, S. C., wants information relative to cost of erection of six large silos; also want price on large ensilage cutter with blower, complete.

**Slate Roofing.**—L. E. Alford, pastor M. E. Church South, Long Beach, Miss., wants prices on slate for roofing.

**Soapstone Slate.**—General Contract Co., P. O. Box 630, New Orleans, La., wants prices on soapstone slate, 2 inches thick, 3x4 feet.

**Sprinkler System.**—Farmers & Merchants' Warehouse Co., Fayetteville, N. C., wants prices on sprinkler system.

**Sprinkler System.**—Tolar, Hart & Holt Mills, Fayetteville, N. C., want prices on sprinkler system.

**Stable Equipment.**—Rice Bros. Company, 308 to 324 North Gay St., Baltimore, Md., wants prices on stable equipment—iron posts, metal stalls, etc.

**Steel Castings.**—Wilmington Iron Works, foot of Orange St., Wilmington, N. C., wants steel castings.

**Steel Ceiling.**—See "Building Materials."

**Stencil Machines.**—Jefferson Powder Co., 601 Woodward Bldg., Birmingham, Ala., wants addresses of manufacturers of machines for manufacturing stencils to mark wooden boxes.

**Surgical Instruments.**—Ernst Schottala, Budapest, Austria-Hungary, wants catalogues and price-lists of surgical instruments and accessories.

**Telephone Equipment.**—Jno. H. Bolinger, 415 Alabama St., Selma, Ala., will want telephone equipment.

**Telephone Equipment.**—Frank T. Alexander, R. F. D. No. 4, Doxey, Okla., wants prices, f. o. b., on telephone equipment, including poles.

**Textile Machinery.**—See "Comfort Machinery."

**Typewriting Letters.**—Lawrence Manning, Charlotte, N. C., wants addresses of firms supplying imitation typewritten letters.

**Ventilating.**—See "Heating Apparatus."

**Wagon.**—L. H. Bruce, Elkton, Va., wants second-hand ice wagon; 1000 pounds capacity.

**Water-works Construction.**—Robert L. Graveley, Box 344, Pensacola, Fla., wants prices and catalogues on gasoline and electric pumps, cast-iron pipe, tanks, fittings, etc., for 10,000-gallon plant.

**Water-works Supplies.**—R. W. Bass, Mayor, Mart, Texas, will receive bids for purchase of material necessary in construction of municipal water-works, which will include steel water tower, return tubular boilers, cast-iron pipe and fittings, fire hydrants and water gate valves, water-works pumps, boiler-feed pumps, lead, oakum and other supplies. Specifications can be obtained from O'Neill Engineering Co., Wilson Bldg., Dallas, Texas.

**Woodworking Machinery.**—J. L. Tate, Litchfield, N. C., wants prices on woodworking machinery.

## INDUSTRIAL NEWS OF INTEREST

### M. R. MacKinnon in Charge.

The Continental Portland Cement Co., 10th and Olive Sts., St. Louis, announces that M. R. MacKinnon has been given charge of its sales department, to succeed Frank S. Clark, who resigned recently.

### Cotton Mill for Sale.

The Pearle Cotton Mill at Beverly, Ga., is offered for sale, and bids will be received until March 20. For full details address E. B. Heard, Middleton, Ga., or George C. Grogan, Elberton, Ga.

### New Cotton Mercerizer.

Job. Kleinewefers Sohne, Krefeld, Germany, advise the Manufacturers' Record that they have invented an automatic revolving mercerizing machine for cotton yarn in the hank. The firm can be addressed for particulars.

### Robert Eisenschmidt, Architect and Superintendent.

Robert Eisenschmidt (formerly draftsman for Charles McMillen, architect, at Wilmington, N. C.) is now located at 130 Person street, Fayetteville, N. C., where he has established offices as architect and superintendent.

### Robert Eisenschmidt, Architect.

Robert Eisenschmidt, architect and superintendent, 130 Person St., Fayetteville, N. C., is now prepared to undertake the preparation of plans and the construction of buildings. He invites manufacturers of building materials to send catalogues and price-lists.

### Riter-Conley Offices.

The Riter-Conley Manufacturing Co., steel construction, Pittsburgh, Pa., has established in the West two new sales offices: In St. Louis, Third National Bank Building, H. B. Clarke as resident manager; in Seattle, Central Building, W. H. Dickinson as resident manager.

### The Burr Oak Belting Co.

A new belt manufacturing enterprise is announced in the Burr Oak Belting Co., which has established a plant at 521 and 523 Livingston St., Cincinnati, Ohio. The entire building is occupied by the company, under the management of W. L. Hallpike, who has had considerable experience in manufacturing and selling belting.

### The Contractors' Supply Co.

The Contractors' Supply Co. has established offices in the First National Bank Bldg., Vicksburg, Miss., and will act as manufacturers' agents for the Vicksburg territory and as far north as Shreveport, La. J. G. March is manager and wants catalogues and prices from manufacturers of construction and building supplies.

### Schieren Company's Boston Offices.

The Charles A. Schieren Company, tanner and belt manufacturer, Schieren Bldg., New York, announces the removal of its offices at Boston, Mass., to 641 and 643 Atlantic avenue, opposite South Station. There the company has a floor space of 5500 square feet, with one of the best-appointed leather stores and belting shops in Boston.

### Equipment for Handling Materials.

The Berry Foundry & Manufacturing Co., St. Joseph, Mo., has made additions to its equipment, installing an extensive overhead-track system with electrically-operated trolley and hoist of the Northern type made by Northern Engineering Works, Detroit. The track is equipped with switches and couvers for facilitating handling of material around the plant.

### Will Represent Manufacturers.

W. A. Stilley, 212 E. Elm St., Goldsboro, N. C., intends to travel in North and South Carolina, dealing direct from manufacturer to consumer, and he will handle a few specialties in mill supplies. Manufacturers who are desirous of increasing their trade in the States named are invited to correspond with Mr. Stilley. It may be added that he states he is thoroughly acquainted with the lumber manufacturing interests of the Carolinas.

### J. Rogers Flannery & Co.

A selling company has been organized under the name of J. Rogers Flannery & Co. to take over the sale of the Tate flexible staybolt and the Keystone nut lock, both manufactured by the Flannery Bolt Co. The new firm has its offices in the Frick Building, Pittsburgh, and is represented at New York by H. A. Pike, at Chicago by W. M. W. Wilson, and at Richmond, Va., by Grundy &

Leahy. Tom R. Davis, Pittsburgh, is the company's mechanical expert.

### Specialist In Time Recorders.

Louis E. Kaiser, specialist in time-recording devices, offices in Phoenix Building, Baltimore, Md., reports the sale of a number of watchman's clocks and time recorders recently. He has equipped the big pier of the Baltimore, Chesapeake & Atlantic Railway Co. at No. 3 Pratt street, Baltimore, where an approved Newman portable watch was installed. The Newman was selected because of its registering device, which embosses the number of the station on the dial direct by the station keys, and because Newman keys are rustproof and non-corrosive.

### To Represent Machinery Builders.

Milton W. Arrowood has consolidated his business as manager of the Atlanta office of the Triumph Electric Co. (of Cincinnati) and other manufacturers with the brokerage department of Adler, May & Co. He assumes the management of the machinery department and invites correspondence from manufacturers wishing representation, especially builders of high-speed and Corliss engines, steam specialties, power equipment, mill and shop machinery and water-works equipments. Mr. Arrowood has his new offices at 71 S. Pryor St., Atlanta, Ga.

### Chesnutt Patent Loading Trucks.

Manufacturers, warehousemen, merchants and others who have use for trucks to handle materials should not fail to investigate the Chesnutt patent loading trucks, manufactured in Oklahoma. These trucks are offered as embodying features enabling their users to handle materials in an efficient and economical manner with the minimum expenditure of energy. They are offered by the Chesnutt Loading Truck Co., main offices at No. 14 North Harvey St., Oklahoma City, Okla. Paul B. Smith is the company's president and T. S. Chesnutt, inventor of the trucks, is treasurer.

### Independent Company Appoints Representatives.

The Independent Pneumatic Tool Co., First National Bank Bldg., Chicago, announces it has appointed Manning, Maxwell & Moore its exclusive representatives in Washington State (excepting Clarke county) and Alaska. It has appointed the Portland Machinery Co., 61 First St., Portland, Ore., exclusive agent in Oregon and Clarke County, Washington. These appointments are effected in order to meet the increasing demand for the company's Thor piston air drills, reamers, tapers, wood borers, riveting hammers, heading hammers, etc., a stock of which will be held in the warehouses of the two appointees.

### Genesco Roofing for Messina.

Not only was American money freely contributed to help the sufferers in the recent earthquake disaster at Messina, but American manufacturers were prominent in meeting some of the demands for building materials ordered through various sources. One of these manufacturers was the Barber Asphalt Paving Co. of Philadelphia, which received an order from the U. S. Government for more than 200,000 square feet of Genesco ready roofing for direct shipment to Messina by Government vessel. This was a tribute to the worth of Genesco roofing, with the merits of which Government officials are well acquainted.

### Producer Gas Tests.

The long series of producer gas tests on various grades of bituminous coal conducted by the United States Geological Survey at the St. Louis Exposition have been productive of such fruitful results that the testing work has been perpetuated and the Government has secured for this purpose a 140-horse-power Westinghouse 3-cylinder vertical single-acting gas engine. This engine is of the same type as that installed at St. Louis, upon which all of the producer gas tests were made. An important schedule of experimental work has been laid out by the Government engineers, and tests will be run on all classes of bituminous coals, lignites, peat, etc.

### The Anderson Oil Expeller.

The Burruss Engineering Co., oil-mill builder, Atlanta, Ga., has increased its capital stock to \$75,000 and secured the exclusive right to sell the Anderson oil expeller in the cotton States. This expeller is now successfully pressing cottonseed as it comes from the gin, besides being used on seed that has been linted on a standard linter. The company announces that "the cake in the shape it comes from the press finds a ready market

in the North and West for feeding purposes, but some plants are grinding it and bolting out a part of the meal. Some expellers are running on delinted seed, which gives the machines an increased capacity and makes a cake which can be ground into meal that brings a good price for feed. About one-third of all the linseed oil is made on Anderson expellers, and nearly 300 machines are now being used in this and foreign countries on other than cottonseed."

### The Columbian Iron Works.

The Columbian Iron Works, Chattanooga, Tenn., will begin operations about March 1. This company will manufacture sawmill and woodworking machines, steam and hydraulic specialties, as well as do general foundry and special machine work. The woodworking machinery will be manufactured under patents of the American Machine & Manufacturing Co. of Charlotte, from which company they were acquired. The Columbian plant is extensive, covering seven acres, and is well adapted to accommodate a large trade. Its equipment includes special tools and improved machinery, a traveling crane for handling of huge castings, etc. Light and a part of the power is furnished by a model electric plant, while the shops are comfortably heated by steam. The plant is located advantageously for a supply of raw material and transportation facilities. H. M. Lofton, general manager, has had ample experience.

### The Eureka Cotton Belting.

The Eureka Fire Hose Co., 13 Barclay St., New York, has been at work for a number of years in perfecting what it has recently placed on the market in Eureka solid-woven belting. This belting is intended for transmission and conveying. It is manufactured on special machinery owned by the company and invented by President B. L. Stowe. Eureka belting is woven under an immense tension in one solid body and has no piles to separate. A natural tendency of the belt in work is to form itself into a coil, which in service adheres to the pulley and makes a powerful drive. The texture of the belt allows the escape of air between the pulley and the belt. Eureka belting is made treated and untreated. Treated belt will stand moisture and climatic changes, and both styles are so solidly put together that what stretch is necessarily left in the belting is minimized, avoiding the necessity of tighteners and annoying delays in taking up.

### Louisiana Marsh Lands Offered.

Immense areas of marsh lands in the South will eventually be reclaimed for cultivation and other purposes. Considerable effort has already been expended in this direction in Louisiana. In the latter State a tract of over 143,000 acres of fresh-water marsh lands, lying from two to four feet above water level, are for sale to capitalists who may contemplate developing. These lands are not submerged, and more than 120,000 acres is prairie, covered with growth of grass and reeds which can readily be burned off during winter. About 12,000 acres contains cypress timber, but not in large quantities. These lands are in Terrebonne parish, Louisiana, within three and a half miles of the Southern Pacific Railway, and can readily be improved by canaling and pumping stations. A detailed statement relative to this property can be obtained by addressing Atwood Violet & Co., 29 Broad St., New York.

### Enlarging the Scaife Plant.

The Wm. B. Scaife & Sons Company, Pittsburgh, Pa., manufacturer of the We-Fu-Go and Scaife water softening, purifying and filtering systems, has found it necessary to build an addition to the plant at Oakmont in order to meet increasing demands for systems for the purification of water for steam boilers, industrial and domestic uses. The company will erect a shop 40x200 feet, equipped with the latest improved machinery. The company has under construction at present for steam-boiler plants systems aggregating 35,000 horse-power, in addition to plants for softening and clarifying water to be used for dyeing and bleaching in woolen and cotton mills and for washing in laundries, also a number of mechanical gravity filter systems for manufacturing and domestic use. Recent Scaife contracts included Pittsburgh-Buffalo Company, Canonsburg, Pa., 1000-horse-power system; Merchants' Ice & Cold-Storage Co., Terre Haute, 750-horse-power system; Auburn & Syracuse Electric Railroad Co., Auburn, N. Y., 750-horse-power system; Columbia Plate Glass Co., Blairsville, Pa., 3000-horse-power system; John A. Manning Paper Co., Troy, N. Y., 750-horse-power system; Natrona (Pa.) Water Co., 500,000-gallon mechanical gravity filter system; Edwards & Chapman (laundry), Spring-

field, Ill., 300-gallon-per-hour system, and Jenner-Quemahoning Coal Co., Hollsopple, Pa., 6000-gallon-per-hour system, boilers and town supply.

### Carborundum in Latin America.

Pablo Besano, the noted architect of Latin America, in selecting an abrasive for cutting the marble to be used in the National Government Building being constructed at Buenos Ayres, has named carborundum, and as a result the mammoth plant of the Carborundum Co. at Niagara Falls, N. Y., has just completed and shipped to the Argentine city four tons of carborundum marble-working wheels. The carborundum wheels were selected for this important work after competition, and the letting of such contract to the Carborundum Co. is another testimonial of the remarkable efficiency of carborundum as a marble cutter. The order included in all about 105 wheels, varying in size from 26 inches in diameter to 14 inches in diameter, and the shipment when completed weighed exactly four tons. This is believed to be the largest single shipment of any abrasive wheels ever sent to South America. The order was put through the carborundum factory in record time by the wheel experts, as the wheels must arrive in Buenos Ayres in time to meet a shipment of special machinery ordered from Germany by Mr. Besano, and to which the carborundum wheels are to be attached.

### Railway Appliances Exhibition.

An exhibition of all appliances used in the construction, maintenance and operation of railways will be held at the Coliseum, Chicago, the week of March 15-20, inclusive. The appliances exhibited will be full size and many of them will be in operation. For a number of years the Road and Track Supply Association has had a small exhibit of models and drawings of these appliances in the parlors of the Auditorium during the annual meeting of the American Railway Engineering and Maintenance of Way Association. As railway officials naturally would prefer to see the devices themselves, it was decided to give an exhibition that would comport in size and importance with the importance of the engineering and maintenance departments of American railways. The Coliseum was chosen for this purpose. This building has on the main floor 45,317 square feet, of which 32,517 square feet will be devoted to exhibits and 12,800 to aisles. In addition, there will be the annex to the Coliseum, which contains 952 square feet, 6132 square feet being devoted to exhibits and 344 to aisles. It will be the largest and most complete exhibit of materials for the engineering department that has ever been held in this country. It is expected that a very large number of railway officials will be in attendance, as it will be an opportunity of seeing the improvements made in the different devices in which they are interested and that they could use to advantage. That the manufacturers have shown great interest and taken advantage of this opportunity to show their product is evidenced by the large spaces that some of them have taken. Two firms have secured upward of 1500 square feet each, several 1000 square feet each, and the others sufficient space to show their devices. There are only a few spaces now left. These can be secured by writing to John N. Reynolds, secretary-treasurer of the Road and Track Supply Association, 100 Harrison St., Chicago.

### TRADE LITERATURE.

#### Remington Typewriters in Foreign Lands.

An interesting evidence of the activity of American typewriter manufacturers in foreign lands is presented in a recent number of "Remington Notes." This publication contains data and photographic views of Remington typewriter salesrooms and offices in Iceland, Asiatic Turkey and India, also views of some of the leading highways and buildings of the countries named, in all of which the Remington machines are in general use. The publication also tells of the development of the writing machine in a generation and of special Remington machines. These are for various languages, including Arabic, to produce which was a rigid test of Remington skill and resource. The Arabic Remington writes from right to left instead of from left to right; writes on the line, above the line and below the line; spaces once for some letters, twice for others, and not at all for others. The Arabic character is used for writing 22 different languages of the Mohammedan world. The Remington Typewriter Co. of New York city can send further information.

## In and Near Estherwood.

[Special Cor. Manufacturers' Record.]  
Estherwood, La., February 18.

The Estherwood Board of Trade is much interested in the opening up of a new oil field in this section, where there is plenty of natural gas coming from the ground. Indications of sulphur are good.

The Government has been asked to cooperate in the building of a model road three miles long between Estherwood and Bayou Blanc, in Acadia Parish. The material for building and keeping in repair good roads is fine in this vicinity. Acadia parish determined this month to work parish prisoners on the public roads and in drainage.

J. B. Foley, formerly of Crowley, but now living near Gueydan, has set out 80 acres in a fig orchard this winter and will set out more as soon as he can. He will also establish a canning plant. Though figs have been grown in a small way for years, this is a new industry for this section. The soil is well adapted to figs and they come into bearing within the second year after planting. J. P. HOYT.

## FINANCIAL NEWS

The MANUFACTURERS' RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

## Review of the Baltimore Market.

## Office MANUFACTURERS' RECORD.

Baltimore, Md., February 24.

The Baltimore stock market was fairly active during the past week, and prices were generally steady. In the trading United Railways incomes sold from 51½ to 51¾; the funding 5s from 79 to 78½; do. scrip, 79; United 4s, 86; Consolidated Gas 6s, 102; do. 5s, 111½; do. 4½s, 93½; Seaboard Company common, 13; do. second preferred, 23 to 22½; Seaboard 4s, 65¾ to 64½; do. three-year 5s, 96½; do. 10-year 5s, 96½ to 96½; Consolidated Cotton Duck preferred, 22 to 22½; Mt. Vernon-Woodberry Cotton Duck 5s, 77¾ to 77; G.-B.-S. Brewing incomes, 10; G.-B.-S. Brewing 1sts, 42½.

Bank stock sold as follows: Citizens', 38½; Mechanics', 27½ to 28; Western, 35; Farmers and Merchants', 48½; Maryland Casualty, 86.

American Bonding sold at 61½ to 65; Continental Trust, 194; Fidelity & Deposit, 153 to 152½; International Trust, 130; Mercantile Trust, 135 to 137; Fidelity Trust, 205; United States Fidelity & Guaranty, 112; Union Trust, 70½; Maryland Casualty, 86.

Other securities were dealt in thus: Atlantic Coast Line of Connecticut, 270; Northern Central Railway, 104½ to 103; Western Maryland Railroad, 11½ to 10; George's Creek Coal & Iron, 83½; Houston Oil common, 8½ to 7½; Atlanta Consolidated Street Railway 5s, 105½; Anacostia & Potomac 5s, 103½ to 104; do. guaranteed, 105½ to 106; Carolina Central 4s, 93½ to 93; City & Suburban (Baltimore) 5s, 109½; do. (Washington) 5s, 105; West Virginia Central 6s, 102½; Baltimore Electric 5s, stamped, 89½ to 91½; Maryland Telephone 5s, 98½ to 98½; Somers Coal Equipment 5s, 1916, 100½; Frederick Turnpike, 3; Detroit United 4½s, 85½ to 84½; Georgia Southern & Florida 5s, 109 to 109½; Baltimore City 3½s, 1930, 102½ to 102; do. do. 1928, 102½; do. do. 1936, 102½; do. do. 1980, 93%; Consolidation Coal, 94½; Atlantic Coast Line of South Carolina 4s, 99½; Charlotte, Columbia & Augusta 1st 5s, 111½ to 111; Metropolitan (Washington) 5s, 111½; Georgia & Alabama Consolidated 5s, 103½ to 103½; Atlantic Coast Line new 4s, certificates, 87 to 86; Atlantic Coast Line of Connecticut 5-20s, 87½; Merchants' & Miners' Transportation Co., voting trust, 73; Atlantic Coast Line 4s, 96½; Consolidation Coal refunding 4½s, 94; Maryland-Pennsylvania incomes, 61½.

## SECURITIES AT BALTIMORE.

## Last Quotations for the Week Ended February 24, 1909.

Railroad Stocks. Par. Bid. Asked.  
Atlantic Coast.....100 116½ ...  
Atlantic Coast of Conn.....100 260 270

Georgia Southern & Florida.....100	29	...	Grendel Mills (S. C.).....114	118
Georgia Sou. & Fla. 1st Pfd.....100	92	...	Henrietta Mills (N. C.).....160	165
Georgia Sou. & Fla. 2d Pfd.....100	68	75	King Mfg. Co., John P. (Ga.).....96	100
Maryland & Pennsylvania.....100	25	25	Lancaster Cotton Mills (S. C.).....125	146
Norfolk Railway & Light.....25	18½	19	Lancaster Cot. Mills (S. C.) Pfd. ....95	96
Seaboard Company Common.....100	10	12½	Langley Mfg. Co. (S. C.).....93	96
Seaboard Company 2d Pfd.....100	23	23	Laurens Cotton Mills (S. C.).....137½	137½
United Ry. & Elec. Co.....50	89½	10	Limestone Mills (S. C.).....140	120
Western Maryland.....50	10	10½	Lockhart Mills (S. C.).....78	81
<b>Bank Stocks.</b>			Lockhart Mills (S. C.) Pfd. ....96	96
Citizens' National Bank.....10	38½	40	Loray Mills (N. C.) Pfd. ....90	92
Farmers & Mer. Nat. Bank.....40	48	49	Marlboro Cotton Mills (S. C.).....165	186
First National Bank.....100	143	143	Mills Mfg. Co. (S. C.).....100	103½
Maryland National Bank.....20	19	20	Mills Mfg. Co. (S. C.) Pfd. ....100	100
Merchants' National Bank.....100	170	...	Monaghan Mills (S. C.).....110	120
National Bank of Baltimore.....100	120½	...	Monarch Cotton Mills (S. C.).....100	102
National Exchange Bank.....100	162	164	Newberry Cotton Mills (S. C.).....130	140
National Howard Bank.....10	13	13	Norris Cotton Mills (S. C.).....115	120
National Marine Bank.....30	42	42	Olympia Cot. Mills (S. C.) 1st Pfd. ....70	80
National Mechanics' Bank.....10	26½	30	Orangeburg Mfg. Co. (S. C.) Pfd. ....80	98
National Union Bank of Md. ....100	120	...	Orr Cotton Mills (S. C.).....105	108
Third National Bank.....100	124	...	Pacolet Mfg. Co. (S. C.).....120	150
Western National Bank.....20	35	35½	Pacolet Mfg. Co. (S. C.) Pfd. ....99	99
<b>Trust, Fidelity and Casualty Stocks.</b>			Pelzer Mfg. Co. (S. C.).....176	175
American Bonding Co. ....25	62½	65	Piedmont Mfg. Co. (S. C.).....160	160
Continental Trust.....100	195	...	Poc Mfg. Co. (S. C.).....140	140
Fidelity & Deposit.....50	151½	152½	Richland Cot. Mills (S. C.) Pfd. ....45	45
Fidelity Trust.....100	205	206	Raleigh Cotton Mills (N. C.).....100	100
International Trust.....100	125	132	Ronoke Mills (N. C.).....168	168
Maryland Casualty.....25	87½	...	Saxon Mills (S. C.).....122	125
Mercantile Trust & Deposit.....50	134	136	Sibley Mfg. Co. (Ga.).....62½	62½
Union Trust.....50	70	73	Spartan Mills (S. C.).....132	140
U. S. Fidelity & Guaranty.....100	111	112½	Springstellen Mills (S. C.).....100	100
<b>Miscellaneous Stocks.</b>			Tucapau Mills (S. C.).....225	250
Ala. Con. Coal & Iron Pfd. ....100	80	...	Trion Mfg. Co. (Ga.).....140	140
Con. Cotton Duck Common.....50	52½	7	Union-Buffalo Mills (S. C.) 1st Pfd. ....58½	60
Con. Cotton Duck Pfd. ....50	20	25	Victor Mfg. Co. (S. C.).....120	125
Con. Gas, Elec. Lt. & P. Pfd. ....100	76	79	Warren Mfg. Co. (S. C.).....93½	95
G.-B.-S. Brewing Co. ....100	4	4	Warren Mfg. Co. (S. C.) Pfd. ....100	100
George's Creek Coal.....100	83½	85	Washington Mills (Va.).....25	31
Mer. & Miners' Trans. Co. ....100	73½	...	Washington Mills (Va.) Pfd. ....110	120
<b>Railroad Bonds.</b>			Whitney Mfg. Co. (S. C.).....140	140
Atlanta & Charlotte Ext. 4½s.....99	...		Williamston Mills (S. C.).....107	107
Atlan. Coast Line 1st 4s, 1952.....96½	...		Wissacott Mills (N. C.).....125	135
Atlan. Coast Line new 4s, Cfts. ....86	...		Woodruff Cotton Mills (S. C.).....122	120
At. Coast L. Com. 4s, Cfts. ....52½	...		Woodside Cotton Mills (S. C.).....102	104
At. Coast Line (Conn.) 4s, Cfts. ....83	86	...	Woodsboro Cotton Mills (S. C.) Pfd. ....95	100
At. Coast Line (Conn.) 4s, 1948.....29½	...			
Carolina Central 4s, 1949.....93	93½	...		
Charleston & West's 4s, 1946.....108½	...			
Charlotte, Col. & Aug. 1st 4s, 1910.....111	112	...		
Charlotte, Col. & Aug. 7s, 1910.....103	103	...		
Coal & Iron Railway 4s, 1920.....100	103½	...		
Florida Southern 4s, 1940.....93	93½	...		
Georgia & Ala. 5s, 1943.....103½	103½	...		
Georgia, Car. & North 1st 5s, 1929.....106	106	...		
Georgia South. & Fla. 1st 5s, 1945.....109	110	...		
Maryland & Penna. 4s, 1951.....92½	93½	...		
Petersburg Class A 5s, 1926.....109	...			
Richmond & Dan. Gold 6s, 1915.....110	...			
Savannah, Fla. & West 6s.....128	...			
Savannah, Fla. & West 5s, 1934.....114½	...			
Seaboard Air Line 4s, 1950.....64½	64½	...		
Seaboard Air Line 5s, 10-year, 1911.....95½	96½	...		
Seaboard Air Line 5s, 3-year, 1906.....96	96½	...		
Seaboard & Roanoke 6s, 1916.....100	...			
South Bound 5s, 1941.....106½	110	...		
Suffolk & Carolina 5s, 1952.....97	...			
Virginia Midland 4th, 1921.....106	...			
Virginia Midland 5th 5s, 1926.....108	...			
Western Maryland 4s, 1952.....83	85	...		
W. Va. Cent. 1st 6s, 1911.....102½	103	...		
Wil. Col. & Aug. 6s, 1910.....101½	101½	...		
Wilmington & Weld. Gold 5s, 1935.....114	114½	...		
<b>Street Railway Bonds.</b>				
Anacostia & Potomac 5s, 1949.....103½	104	...		
Anacostia & Potomac 5s, Gtd.....106	106	106½		
Atlanta Con. Street Railway 5s.....104½	105	...		
Augusta Ry. & Elec. 5s, 1940.....100	101	...		
Baltimore City Pass. 5s, 1911.....101	101½	...		
Balto. Trac. 1st 5s, 1929.....110	115½	...		
Balto. Trac. (N. B. D.) 5s, 1942.....114½	115	...		
Charleston Con. Elec. 5s, 1990.....95	90	...		
City & Suburban 5s (Balto.).....1922.....169½	...			
City & Suburban 5s (Wash.).....1948.....105	105½	...		
Lexington Railway 1st 5s, 1949.....98	...			
Metropolitan 5s (Wash.).....1925.....111	111½	...		
Norfolk Railway & Light 5s.....95½	96½	...		
United Railways 1st 4s, 1949.....86	86	86½		
United Railways Inc. 4s, 1949.....51	52	52		
United Railways Funding 5s.....78½	79½	79½		
<b>Miscellaneous Bonds.</b>				
Baltimore Electric 5s.....90½	90½	90%		
Consolidated Gas 6s, 1910.....102	102	102½		
Consolidated Gas 5s, 1939.....112	...			
Con. Gas, Elec. Lt. & P. 4½s.....93½	93½	93½		
Fairmount Coal 5s.....84½	84½	84½		
G.-B.-S. Brewing 1st 4s.....94	95½	95½		
G.-B.-S. Brewing Inc. 4s.....10	12	12		
Maryland Steel Co. 5s.....102½	102½	...		
Maryland Telephone 5s.....97½	98½	98½		
Mt. Vernon-Woodby Col. Duck 5s.....77	77	77½		
United Elec. Lt. & P. 4½s.....94	94	...		
<b>SOUTHERN COTTON-MILL STOCKS.</b>				
Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending February 22.	Bid. Asked.			
Abbeville Cotton Mills (S. C.).....75	...			
Aiken Mfg. Co. (S. C.).....82	...			
American Spinning Co. (S. C.).....145	...			
Anderson Cotton Mills (S. C.).....59	60	...		
Arkwright Mills (S. C.).....100	102	...		
Augusta Factory (Ga.).....65	70	...		
Avondale Mills (Ala.).....115	125	...		
Belton Mills (S. C.).....115	120	...		
Bibb Mfg. Co. (Ga.).....114	...			
Brandon Mills (S. C.).....148	...			
Barbours Cotton Mills (N. C.).....120	140	...		
Chadwick-Hosking Mfg. Co. (N. C.) Pfd. ....100	90	...		
Chilquila Mfg. Co. (S. C.).....129	132	...		
Clifton Mfg. Co. (S. C.).....103	106	...		
Clifton Mfg. Co. (S. C.) Pfd. ....99	101	...		
Clinton Cotton Mills (S. C.).....105	105	...		
Columbus Mfg. Co. (Ga.).....98	...			
Courtenay Mfg. Co. (S. C.).....96	...			
Dalton Mfg. Co. (Ala.).....100	105	...		
Darlington Mfg. Co. (S. C.).....70	76	...		
Drayton Mfg. Co. (S. C.).....100	100	...		
Eagle & Phenix Mills (Ga.).....121	...			
Easley Cotton Mills (S. C.).....151	...			
Enoree Mfg. Co. (S. C.).....69	71	...		
Enoree Mfg. Co. (S. C.) Pfd. ....94½	94½	...		
Enterprise Mfg. Co. (S. C.).....82	90	...		
Exposition Cotton Mills (Ga.).....240	...			
Gaffney Mfg. Co. (S. C.).....70	74	...		
Gainesville Cotton Mills (Ga.).....48	...			
Granby Cot. Mills (S. C.) 1st Pfd. ....45	45	...		
Graniteville Mfg. Co. (S. C.).....155	160	...		
Greenwood Cotton Mills (S. C.).....65	65	...		
<b>Bank Statements.</b>				
The First National Bank of Birmingham, Ala., reports February 5, 1909, loans and discounts, \$5,643,975; total cash, \$3,447,755; capital stock, \$1,000,000; surplus and profits, \$736,160; circulation, \$98,900; total deposits, \$7,954,314; total resources, \$10,673,284; W. P. G. Harding, president; J. H. Woodward and J. H. Barr, vice-presidents; Thomas Hopkins, cashier; F. S. Foster and Thomas Bow-				
ron, assistant cashiers; J. E. Ozburn, secretary savings department.				
The Citizens' National Bank of Baltimore, Md., reports at close of business February 15, 1909, loans and discounts, \$6,821,952; due from banks, \$676,395; cash and reserve, \$2,452,907; capital, \$1,000,000; surplus and profits (net), \$1,918,708; circulation, \$807,600; deposits, \$7,919,625; total resources, \$12,050,934; Wm. H. O'Connell, president; Albert D. Graham, vice-president and cashier; Frank M. Dushane, assistant cashier.				
<b>New Corporations.</b>				
Alto, Texas.—State Bank of Alto, capital \$10,000, organized with directors thus: H. H. Berryman, president; M. C. Parish, cashier; M. E. McClure, Dr. C. C. Francis, N. C. Acnew, J. E. Watters, E. A. Blount and a Mr. De				

J. B. Sikes president and Marcus M. Bright cashier.

Gadsden, Ala.—Organized: Alabama Bank & Trust Co.; capital \$50,000; Dr. C. L. Guice, president; J. E. Blackwood, first vice-president; R. E. Grace, second vice-president; D. H. Porter, cashier; directors, Dr. C. L. Guice, R. E. Grace, A. B. Harris, J. E. Blackwood, F. H. Brown, W. H. Porter and C. E. Meeks.

Garyville, La.—Gary State Bank has begun business; D. C. Labiche, president; S. G. Bourgois, vice-president; J. A. Schafer, cashier; Alfred Labiche, assistant cashier.

Hastings, Okla.—The First National Bank has been converted into a State institution; capital \$15,000; incorporators, E. L. Worrell, A. L. Davis and E. B. Johnson.

Hurtsboro, Ala.—The MANUFACTURERS' RECORD is informed that Farmers and Merchants' Bank has been organized.

Korn, Okla.—Chartered: Korn State Bank; capital \$10,000; directors, G. B. Flaming of Korn, J. J. Saliska and H. H. Zohlgenthuf of Weatherford.

Kingsport, Tenn.—Organized: Citizens' Bank; capital \$25,000; David Roller, president, and J. C. Jones of Roanoke, Va., cashier.

Krum, Texas.—Reported that the branch of the Continental Bank & Trust Co., capital \$20,000, has been chartered with J. G. Wilkinson president and Byron R. Smith cashier.

Lexington, N. C.—Bank of Davidson has begun business; capital \$50,000; directors, J. B. Smith, president; J. W. Noell and C. L. Leonard, vice-presidents; J. L. Michael, J. Adam Hedrick, E. P. Crofts, J. N. Myers, W. Lee Harbin, P. S. Vann, L. J. Peacock, J. Lindsay McCreary, Z. V. Walser, W. F. Harris, J. L. Hatch, J. A. Lindsay, L. F. Barr and A. C. Harris.

Louisville, Ark.—Approved: First National Bank; capital \$25,000; organizers, S. W. Smith, Shreveport, La.; Ed. Alexander, R. L. Searey, G. W. Dobson and N. D. Harrel.

Lueders, Texas.—Chartered: Lueders State Bank; capital \$10,000; incorporators, W. H. King, W. L. Fisher, W. W. Sampie and others.

Monticello, Ga.—Authorized to begin business: First National Bank; capital \$50,000; L. O. Benton, president; R. L. Furse, vice-president; E. Clyde Kelley, cashier, and Taney O. Benton, assistant cashier. The MANUFACTURERS' RECORD is informed that business began February 18.

Pratt City, Ala.—Organized: Pratt City Loan & Investment Co.; S. T. Key, president; Charles T. Smith, secretary, and W. W. Harrell, Jr., treasurer.

Roanoke, Va.—Savings Investment Corporation; capital \$25,000 to \$60,000; C. D. M. Showalter, president and treasurer; R. H. Angell, vice-president; Mrs. Lou Ella Showalter, secretary.

Sevierville, Tenn.—Reported that a \$25,000 bank will begin business about April 1. Among the stockholders are L. C. McMahan, Jas. W. McMahan, Grant McMahan, C. M. McMahan, J. Victor Henderson, William Henderson, Asa Delozier, Joseph Delozier, A. J. Isham, F. E. Woody, A. M. Paine and others.

Sour Lake, Texas.—The Sour Lake State Bank has organized with directors thus: R. S. Sterling of Houston, president; Gus Mobray of Sour Lake, vice-president; H. C. Hurley, cashier; Roy Hankamer, M. J. McLoughlin, Thomas P. Lee, J. B. Robinson, M. Finkelstein and Frank H. Carpenter.

Springwood, Va.—Plan to establish \$10,000 State bank reported under consideration.

Sumter, S. C.—Sumter Trust & Mortgage Co., capital \$25,000, incorporated by

J. K. Crosswell, Perry Moses, Jr., W. W. Sibert, Isaac C. Strauss, Richard I. Manning, H. J. McLaurin, Jr., and David D. Moise.

Waiteville, W. Va.—Bank of Waiteville reported organized with \$25,000 capital.

Washington, D. C.—Local reports state a banking and brokerage firm under the name of Harper & Co. is being organized by J. Miller Kenyon and Thomas L. Hume.

#### New Securities.

Ardmore, Okla.—March 23 election will be held to vote on \$225,000 improvement and \$160,000 school bonds.

Ardmore, Okla.—Awarded to Spitzer & Co., Toledo, at 104.75 premium, subject to election, \$80,000 sewer-extension, \$75,000 water, \$35,000 street-improvement, \$20,000 fire-department and \$15,000 park bonds.

Atlanta, Texas.—Election ordered April 6 to vote on \$15,000 of water-works bonds.

Auburn, Ala.—Bids will be received until noon March 8 by R. W. Burton, clerk, for \$7000 of 5 per cent. 30-year water-works bonds.

Austin, Texas.—Reported: Leroy Trice of Longview has purchased \$50,000 of Travis county road and bridge bonds.

Ballinger, Texas.—Voted: \$20,000 of school district bonds.

Bartow, Fla.—W. W. Clark, Mayor, writes MANUFACTURERS' RECORD that election will be held to vote on \$50,000 of sewerage bonds, interest not to exceed 6 per cent. A later report gives April 20 as date for election.

Beaufort, S. C.—Bids received by R. A. Long, chairman Board of Commissioners of Public Works, until noon February 25 for \$43,000 of 5 per cent. 20-30-year improvement bonds.

Berlin, Md.—Orlando Harrison, Mayor, writes the MANUFACTURERS' RECORD that \$2500 of water and electric-light bonds will be sold.

Blacksburg, S. C.—Farson, Son & Co., Chicago, reported to have been awarded \$15,000 of 5 per cent. 20-year improvement bonds.

Camden, S. C.—MANUFACTURERS' RECORD informed that the General Assembly of South Carolina has passed a bill authorizing Kershaw county to issue or borrow funds for purpose of erecting steel bridge over Wateree River. Address M. C. West, supervisor Kershaw county, or S. R. Adams, county commissioner, Camden.

Carrollton, Ga.—Election March 10 to vote on \$14,500 of 5 per cent. 16-29-year electric-light-plant bonds.

Coalgate, Okla.—Information received by MANUFACTURERS' RECORD states that an election will be held in Coal county to vote on \$75,000 of courthouse bonds.

Coalgate, Okla.—D. D. Brunson, Mayor, informs MANUFACTURERS' RECORD that \$15,000 of bonds have been recently issued, and that it is expected to issue \$25,000 of water-works bonds in the near future.

Coffeeville, Miss.—The MANUFACTURERS' RECORD is informed that \$10,000 or \$12,000 of school-building bonds will probably soon be issued.

Cleveland, Tenn.—March 20 election will be held to vote on \$60,000 water-works bonds.

Columbus, Ga.—M. M. Moore, city clerk, writes MANUFACTURERS' RECORD that \$75,000 of bridge bonds will probably be offered toward the close of the year.

Conroe, Texas.—Bids will be received until 3 P. M. March 15 by C. T. Darby, Mayor, for \$17,000 of 4 per cent. 10-40-year water-works bonds.

Corinth, Miss.—Voted: \$9000 street improvement, \$8000 water improvement and \$8000 funding; 5 per cent. 5-20-year bonds.

Corinth, Miss.—Voted: \$8000 of water-works improvement and \$9000 street-improvement bonds. B. R. Warriner, city clerk, writes the MANUFACTURERS' RECORD that the bonds will be 5-20-year 5 per cents, and that bids for same will be received until April 1.

Corpus Christi, Texas.—Information received by MANUFACTURERS' RECORD states that it is expected to issue \$37,000 of water-works bonds in the near future. O. O. Wright is city secretary.

Corsicana, Texas.—Reported that \$10,000 of the \$15,000 of 4 per cent. school bonds have been purchased by the State.

Cullman, Ala.—Election held in Cullman county to vote on \$150,000 of road bonds defeated.

Dallas, Texas.—Reported: Election April 6 to vote on \$500,000 water-works bonds.

Douglasville, Ga.—Reported that election will be held to vote on electric-light bonds.

Elgin, Texas.—Bids will be received until noon March 1 for \$30,000 of 5 per cent. 25-40-year water-works bonds; J. C. Miller, chairman finance committee.

Elberton, Ga.—J. M. Webster, Mayor, informs MANUFACTURERS' RECORD that \$35,000 of school and \$5000 of light bonds have been voted and will be on the market soon.

Elk City, Okla.—Voted: \$35,000 of water, sewer, city hall and fire-station bonds.

El Paso, Texas.—Information received by MANUFACTURERS' RECORD states that plans are being prepared by El Paso county for the sale of \$250,000 of road and \$25,000 jail improvement bonds. Address County Judge.

Excelsior Springs, Mo.—Voted: \$10,000 of improvement bonds.

Foraker, Okla.—Bids will be received by J. W. Williams, clerk Board of Education, until March 1 for \$20,000 of 6 per cent. bonds of school district No. 5.

Fort Worth, Texas.—Approved: \$100,000 of street and \$50,000 school bonds.

Galveston, Texas.—The MANUFACTURERS' RECORD is informed by Geo. F. Burgess, clerk Galveston county, that \$616,000 of bonds, \$500,000 being for causeway across Galveston Bay and \$116,000 for drainage district No. 1, are to be issued. Bids for the drainage bonds will be asked in about a month.

Galveston, Texas.—A. T. Dickery, city engineer, informs MANUFACTURERS' RECORD that the remaining \$200,000 of paving, drainage and filling and the \$100,000 of duplicate water-main bonds, authorized 10 months ago, will be issued in March.

Graymont, Ala.—Voted: \$10,000 sanitary sewer bonds.

Grenada, Miss.—S. T. Tatum, Mayor, writes MANUFACTURERS' RECORD that the \$250,000 of water-works bonds will probably not be issued for a month or two.

Mineral Wells, Texas.—Reported sold: \$18,000 sewer bonds.

Mobile, Ala.—General Council has authorized the issue of \$320,000 of paving bonds.

Montgomery, Ala.—Election held in Montgomery county January 4 to vote on \$150,000 of bonds declared invalid and a new election is called for March 25.

Moultrie, Ga.—Reported that election will soon be held to vote on \$50,000 of water and fire-protection bonds.

Murphy, N. C.—The information received by MANUFACTURERS' RECORD states that from \$30,000 to \$40,000 of water-works bonds will be issued. Address J. H. Carter, Asheville, N. C.

Newnan, Ga.—Reported that election will be held to vote on \$16,000 of bonds for school building in South Newnan.

Newport News, Va.—Information received by MANUFACTURERS' RECORD states

Hondo, Texas.—Election is to be held in Medina county April 6 to vote on \$40,000 of road and bridge bonds.

Houston, Texas.—State has purchased at par \$100,000 courthouse and \$20,000 of road and bridge 4 per cent. 10-40-year Harris county bonds.

Hubbard, Texas.—Approved: \$15,000 of sewer bonds.

Jellico, Tenn.—Reported that application will be made to Legislature for authority to issue \$90,000 of water-works and sewerage bonds.

Jesup, Ga.—MANUFACTURERS' RECORD is informed that city contemplates issuing bonds for sewerage and water system.

Kansas City, Mo.—The MANUFACTURERS' RECORD is officially informed that the city expects to issue in the near future \$5,000,000 or \$6,000,000 of sewer, street-repair plant, incinerating plant and park-improvement bonds. A. D. Ludlow is assistant and acting city engineer.

Kansas City, Mo.—Bids received until 10 A. M. March 3 for \$200,000 of Kaw Valley drainage bonds; William H. Daniels, president of the board. The bonds are 27-year 4 1/2 per cents.

Kinston, N. C.—Application is to be made to Legislature, it is reported, for authority to hold election to vote on \$75,000 school, light, water, sewer and other improvement bonds.

Knoxville, Tenn.—Arrangements are to be made immediately for the sale of \$750,000 of water-works and \$50,000 of viaduct bonds; John M. Brooks, Mayor.

Laurel, Miss.—Information received by MANUFACTURERS' RECORD states that it is expected to issue \$20,000 of street and water-works-extension bonds in the near future. A. W. Noble, Mayor.

Lawton, Okla.—Thomas J. Bolger of Chicago has purchased at \$4200 premium \$100,000 of high-school bonds.

Linden, Texas.—Approved: \$425 of 5 per cent. 20-year Cass county school bonds.

Lockhart, Texas.—Reported that petition has been presented to the Caldwell County Commissioners asking that election be called to vote on \$50,000 of precinct No. 1 road bonds.

Lumberton, N. C.—Bids will be received by E. J. Britt, attorney Robeson county, until April 1 for \$25,000 of 30-year funding bonds.

Marlow, Okla.—R. J. Edwards, Oklahoma City, has been awarded at 102 the \$35,000 of 6 per cent. 20-year school district bonds.

Memphis, Tenn.—Bill providing for \$500,000 of school-building bonds reported under consideration.

Meridian, Miss.—C. W. O'Leary, city clerk, writes MANUFACTURERS' RECORD that the \$250,000 of water-works bonds will probably not be issued for a month or two.

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Mobile, Ala.—General Council has authorized the issue of \$320,000 of paving bonds.

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Newnan, Ga.—Reported that election will be held to vote on \$16,000 of bonds for school building in South Newnan.

Newport News, Va.—Information received by MANUFACTURERS' RECORD states

[For Additional Financial News, See Page 70.]

**WANTED**

\$100,000 to loan on first mortgage security at 6% in Charlotte and vicinity in amounts of \$2000 to \$20,000.

F. C. ABBOTT & CO. Charlotte, N. C.

Established 1835.

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South and Water Sts., BALTIMORE, MD.

DOUGLAS H. THOMAS, President.  
WM. INGLE, Vice-Pres. and Cashier.  
J. C. WANDS, Asst. Cashier.

JOHN B. DUNN, Asst. Cashier.

Capital, \$1,500,000

Surplus and Profits, - - - - - \$900,000

Deposits, \$12,000,000

Accounts of Banks, Bankers, Corporations and Individuals solicited. We invite correspondence.

**JOHN NUVEEN & CO.**

1st Nat. Bank Bldg., CHICAGO

We purchase SCHOOL, COUNTY and MUNICIPAL BONDS. Southern Municipal Bonds a Specialty.

Write us if you have bonds for sale.

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OF KEY WEST, FLA.

United States Depositary and Disbursing Agent  
Capital, - - - - - \$100,000  
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A general banking business transacted.

Special attention given to collections.

**COUNTY, SCHOOL AND MUNICIPAL OFFICIALS AND CONTRACTORS**

Write us whenever you have bonds for sale  
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Power transmission devices hung on the outside of the factory save floor space, overhead space, light, extra shafting and bearings. In case of accident, damage is confined to without, where there are no people or costly machinery and fittings to injure.

Outdoor transmissions must be weather-proof and must require little attention.

These conditions are more fully satisfied by

**"American Transmission Rope"**

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It will pay you to write for our "Blue Book of Rope Transmission."

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65 WALL ST., NEW YORK CITY

**INTERNATIONAL TRUST CO.**

OF MARYLAND

BALTIMORE, MD.

Capital and Surplus, \$2,500,000

**MAKES A SPECIALTY OF SOUTHERN BUSINESS**

PRIVATE, State and National Bank Accounts. Cotton Mill Accounts. Estate Administration. Accounts invited from General Manufacturers and Business Men. High-Class Bonds and Other Forms of Investment. Interest Allowed on Deposits Subject to Check and Special Rates Made on Time Deposits. Your Business is Solicited. Correspondence Invited.

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WALTER D. FOCKE, Asst. Sec. and Asst. Treas.

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**A Progressive and Conservative Trust and Banking Institution****THE BALTIMORE TRUST & GUARANTEE COMPANY**

BALTIMORE, MD.

Capital, : : : \$800,000  
Surplus, : : : \$2,100,000

THOS. H. BOWLES, President  
Acts as Executor, Administrator, Trustee, Receiver for Firms, Individuals or Corporations.

Receives Deposits subject to Check, and allows Liberal Rates of Interest thereon.

**The National Exchange Bank OF BALTIMORE, MD.**

Hopkins Place, German and Liberty Sts.

Capital, \$1,000,000

July 15, 1908, Surplus and Profits, \$671,631.60

**OFFICERS**

WALDO NEWCOMER, President.  
SUMMERFIELD BALDWIN, Vice-Pres.  
CHARLES W. DORR, Vice-Pres.  
R. VINTON LANSDALE, Cashier.  
WM. J. DELCHER, Asst. Cashier.  
Accounts of Mercantile Firms, Corporations, Banks, Bankers and Individuals Invited.

**Bank of Richmond**

Capital and Surplus, \$1,500,000

**RICHMOND, VA.**

JOHN SKELTON WILLIAMS, President.  
FRED'K E. NOLTING, 1st Vice-President.  
T. K. SANDS, 2d Vice-President and Cashier.  
H. A. WILLIAMS, Assistant Cashier.  
L. D. CRENSHAW, Jr., Trust Officer.

In aiding the development of legitimate business enterprises, this bank believes that it performs a required duty, and to this end offers the services of a live, progressive bank, conservatively managed.

**John L. Williams & Sons**

Cars, 8th & Main Sts. BANKERS RICHMOND, VA.  
DEALERS IN

**HIGH-CLASS SECURITIES**

Negotiate Entire Issues of Bonds for States, Cities and Railroad Corporations.

Foreign Exchange Bought and Sold.

**MANUFACTURERS and JOBBERS**

Frequently find it necessary to have BANKING FACILITIES in addition to those offered by local banks.

**FIRST NATIONAL BANK OF RICHMOND, VA.** With assets of nine million dollars, offers just the additional facilities required.

Jno. B. Purcell, President.  
Jno. M. Miller, Jr., Vice-Pres. and Cashier.

**JOHN W. DICKEY**

SOUTHERN SECURITIES

**AUGUSTA, GEORGIA****MARK PACKARD****COAL OPERATOR - BUFFALO, N. Y.**

invites correspondence with parties desirous of investing in coal developments on the Cumberland Plateau, Tenn.

\$45,000 of Cross Creek Coal Co. 6% Gold Bonds, covering 7000 acres of Battle Creek Coal, for sale. Most attractive Investment in the South.

Best coal, best market and best facilities in the South.

**OFFICES:**

BUFFALO, N. Y. CHATTANOOGA, TENN.  
WELCH, W. VA.

**MERCANTILE TRUST AND DEPOSIT COMPANY**

OF BALTIMORE.

N. E. Corner German and Calvert Streets.

Capital Stock and Surplus.....\$5,948,449

Deposits.....\$7,900,000

Resources .....\$13,850,913

This Company solicits deposit accounts from Banks, Corporations and Individuals, and allows interest thereon at liberal rates conforming to conservative business.

We invite correspondence and personal interviews, and will be pleased to furnish information to those parties who desire to make deposits with us.  
JOHN GILL, President.

**INVESTMENT SECURITIES**

Southern Stocks and Bonds  
Municipal and Corporation  
Cotton Mill Stock a Specialty

WM. S. GLENN - Broker - SPARTANBURG, S. C.

**SURETY BONDS****Fidelity & Deposit Co.**

OF MARYLAND

Home Office. - BALTIMORE, MD.

Assets Over \$5,000,000

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TRANSMISSION ROPE

that \$100,000 of street-paving bonds were recently sold.

Orange Park, Fla.—Voted: \$5000 of street-improvement bonds. Address the Mayor.

Paris, Texas.—March 23 an election is to be held to vote on \$10,000 City Hall improvement, \$100,000 toward rebuilding burned high school, \$10,000 filtration plant, \$10,000 abattoir and \$25,000 street paving 5 per cent. 10-50-year bonds; O. B. McKnight, city secretary.

Perry, Fla.—John C. Calhoun, county clerk, informs MANUFACTURERS' RECORD that election will be held in Taylor county March 16 to vote on \$15,000 of sewerage and \$15,000 of street-improvement 5 per cent. 20-year bonds.

Petersburg, Va.—G. B. Gill, city clerk, informs MANUFACTURERS' RECORD that the proposition to issue \$80,000 of school and \$70,000 of street-improvement bonds is now in the hands of the finance committee, and will probably be acted on in March or April.

Pontotoc, Miss.—Voted: \$25,000 of school-building bonds.

Raleigh, N. C.—Bill has been introduced in Legislature providing for \$500,000 of 4 per cent. 40-year State institution bonds.

Rison, Ark.—School district contemplates issuing bonds.

Selma, Ala.—MANUFACTURERS' RECORD is informed by V. B. Atkins, Mayor, that about \$100,000 of street-paving bonds will be issued in near future.

Shattuck, Okla.—Authorized: \$50,000 water-works bonds.

Shawnee, Okla.—Spitzer & Co., Toledo, Ohio, have purchased \$195,000 of convention hall, hospital, street and sewer bonds. It was previously reported that the bonds were sold to another concern, but the deal was never closed.

Snyder, Texas.—The MANUFACTURERS' RECORD is informed that Scurry county is offering for sale \$70,000 of courthouse bonds. A. S. Lower is commissioner and justice of the peace, precinct No. 1.

Sparta, Tenn.—Election to be held March 20 to vote on \$50,000 of road bonds.

Sulphur, Okla.—City proposes to issue from \$100,000 to \$200,000 street-improvement bonds. Address H. V. Hinckley, secretary 30,000 Club.

Tazewell, Va.—The MANUFACTURERS' RECORD is informed that bids are being received for \$12,000 of 6 per cent. 5-30-year bonds; E. V. Spotts, Mayor.

Texarkana, Texas.—Voted: \$125,000 high-school, \$5500 jail, \$3500 street-improvement and \$2000 fire-station bonds; A. B. De Loach, Mayor.

Thomaston, Ga.—Bids will be received until 7 P. M. March 2 for \$10,000 of 6 per cent. 5-14-year electric-light improvement bonds; J. T. Ingram, Jr., city clerk.

Tonkawa, Okla.—J. P. Jarolemon, Mayor, informs MANUFACTURERS' RECORD that the city has issued and sold \$18,500 of electric-light, \$13,500 water-works and \$5000 of sewer bonds.

Victoria, Texas.—H. Higgins, clerk, informs MANUFACTURERS' RECORD that it is expected to issue about \$25,000 of school and street bonds in near future.

Vinita, Okla.—S. F. Parks, secretary, writes MANUFACTURERS' RECORD that election will soon be held to vote on \$50,000 of school bonds.

Waxahachie, Texas.—Voted: \$40,000 of 5 per cent. 40-year bonds of Chambers Creek Valley Drainage District No. 1.

Weatherford, Texas.—W. K. Cunningham, city clerk, informs MANUFACTURERS' RECORD that city has recently sold \$25,000 of electric and water and \$25,000 of school-building bonds.

Webb City, Mo.—For particulars regarding the \$90,000 of school district bonds voted on February 9 address J. T. Aldridge, secretary Board of School Directors. L.

O. Walker is city clerk. A press report states bids will be received until 8 P. M. March 5.

Wesson, Miss.—Reported: Bids will be received in March for \$5000 of school and \$3000 of funding 5 per cent. 10-year bonds.

At Tazewell, Va., bids are being received for \$12,000 of 6 per cent. 5-30-year bonds. *Further particulars will be found in the advertising columns.*

#### Financial Notes.

Reynolds & Co., bankers, 31 Nassau street, New York, announce that they have arranged with Mr. Franklin W. Levering, Vickers Building, Baltimore, to act as correspondent for the Baltimore territory.

The MANUFACTURERS' RECORD is officially informed that on July 1, 1909, Columbus, Ga., will exchange \$250,000 of 4 1/2 per cent. bonds for a like amount which fall due on that date. M. M. Moore is city clerk.

In a reference to the First National Bank of Richmond, Va., appearing in the *Daily Bulletin of the Manufacturers' Record* of February 16 and in the MANUFACTURERS' RECORD of February 18, Mr. W. P. Shelton was inadvertently mentioned as cashier. He is an assistant cashier, the cashier being Mr. John M. Miller, Jr., who is also vice-president.

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